



HAL
open science

Framework for implementing alternative credit schemes and digital social currencies

Stefano Lucarelli, Marco Sachy, Lucia Bonacci, Eleonora Gentilucci, Alfonso
Giuliani, Lucio Gobbi

► **To cite this version:**

Stefano Lucarelli, Marco Sachy, Lucia Bonacci, Eleonora Gentilucci, Alfonso Giuliani, et al.. Framework for implementing alternative credit schemes and digital social currencies. [Research Report] CNRS. 2015. hal-01475589

HAL Id: hal-01475589

<https://hal.science/hal-01475589>

Submitted on 23 Feb 2017

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Framework for implementing alternative credit schemes and digital social currencies

Decentralised Citizens Engagement Technologies
Specific Targeted Research Project Collective Awareness Platforms



Creative Commons
Attribution-NonCommercial-
ShareAlike 4.0 International
License

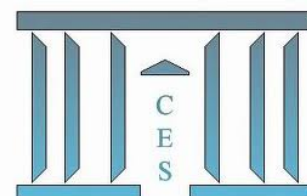


FP7 – CAPS
Project no. 610349
D-CENT
Decentralised Citizens
Engagement Technologies



Lead beneficiary: Unisor

D3.5 Framework for implementing
alternative credit schemes and
digital social currencies



September 2015
Version Number: 1

Authors:
Stefano Lucarelli
Marco Sachy
Lucia Bonacci
Eleonora Gentilucci
Alfonso Giuliani
Lucio Gobbi



Editors and reviewers:
David Laniado
Denis Roio

The work leading to this publication has received funding from the European Union's Seventh Framework Programme (FP7/2007 – 2013) under grant agreement n° 610349.

The content of this report reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

Contents

1. Executive summary	4
2. Part I: Towards a normative framework for the digital social currency.	6
3. Two Relevant examples of regulation: the Californian Alternative Currencies Act and the French Law for the <i>Economie Social et Solidaire</i> (ESS)	7
3.1. The AB-1326	7
3.1.1. Risks	10
3.1.2. Opportunities	11
3.2 The French Law for the <i>Economie Social et Solidaire</i> (ESS)	12
3.2.1. The legislative framework for French local complementary currencies	17
3.2.2 Risks	18
3.2.3. Opportunities	21
4. Some insights on democratic governance of economic alternative structures: Ostromian’s approaches to money	24
4.1 The contributions of Camille Meyer	24
4.2 The financial illusion of Gaël Giraud	28
4.3. <i>La finance e la monnaie comme un commun</i> by Jean-Michel Servet	30
4.4. Jack Birner: currency as cultural resource.....	32
4.5. Conclusive remarks	35
5. PART2: Implementing the Freecoin: Normative Frameworks for D-Cent Pilots	38
5.1. The state of the art in Catalonia.....	38
4.2 The state of the art in Italy	46
4.3 The state of the art in Finland	48
4.4 The state of the art in Iceland	49
Appendices – Legislation	51

Appendix 1.1 AB-1326 Virtual currency	51
Appendix 1.2 The French Law for ESS, article 1 and article 16.	66
Appendix 1.3 The Italian Proposed Legislation in order to regulate issuing and circulation of complementary currencies.....	69
Appendix 1.4 The Spanish Law on Electronic Money.....	74
Appendix 1.5 Funcional Analysis of Eurocat – Microencorsement and Mutual Credit System.....	93
References	105

1. Executive summary¹

This deliverable documents the state of the art of legal frameworks of implementation both in general, but also particularly for D-CENT Digital Social Currency experiments with pilot communities in Spain, Iceland, Finland and the use case in Italy. The richness in contexts of the various pilots is remarkable and is being taken into account as Freecoin software development and systems are rolled out in the last phases of the project. At a glance, only the Spanish and Icelandic regulatory contexts are detailed enough to allow for experimentation within clear boundaries. . In Iceland there is only a single article that remands to the prohibition to issue bonds to the bearer outside the national banking system. Conversely, in Finland, rules are absent, although digital alternative and complementary currencies are not considered as illegal, they just exist in the informal economy. Finally, Italy is on its way to processing regulation in both the legislative and executive. Hence, Freecoin implementation will have to take into account these differences while promoting lawful operations in each pilot specific context in order to empower communities with a long-term viable framework of implementation.

Part I of the deliverable presents two examples of the most updated regulatory frameworks for complementary currencies from around the world. First, the discussion of the AB-1326, a framework for alternative and complementary currencies proposed in California and secondly, the elicitation of the French Law for Social and Solidarity Economy. These two examples give testimony of a desirable regulatory dynamic that is underpinning the sector of alternative currencies in a more educated way. Accordingly, distributed ledgers are also facing the challenge of regulation and Freecoin will probably offer reasons for concern around its statutory attributes within different pilot contexts.

Indeed, in Spain and Italy both regulations and best practices accumulated in the field of complementary currencies as the detailed Functional Analysis of Eurocat Micro-endorsement and Mutual Credit System for the Catalan SME sector in Appendix I.4 or the bill proposal in Italy presented in section 4.2. However, in Iceland and especially Finland, regulation on financial vehicles such as those possible to implement via Freecoin is scarce if not absent (Finland has not regulation on alternative and complementary currencies), pace fiscal duties to be performed in national currency (Euro in Finland).

At the end of Part I, in order to identify future economic models of regulation based on new institutions of shared common wealth, we will also present a review of the contributions that analyse the monetary and financial institution using an Ostromian approach. The most important lesson that can be learned is that the inclusion of currency in the framework of the democratic governance of the commons allows to reconstruct, through a bottom-up process, the essential link that binds the currency to the real economy. Thus, the appendices focus on the state of the art of national and regional regulatory frameworks relevant to piloting Digital Social Currency experiments in D-CENT in order to offer a description of the desirable conditions for Freecoin initialisation in pilot context specific conditions.

While for Eurocat (Spanish pilot) regulatory frameworks had been put on paper by the very lead users of the system (see Appendix I.4, below), in Iceland, Finland and Italy, experimentation will count on heuristics and inference in a numerically controlled environment, ranging from a few thousands (Iceland

¹Stefano Lucarelli and Marco Sachy

– Your Priorities members taking part to the participatory budgeting event), to a few hundreds (members of Helsinki Urban Cooperative Farm), to a few dozens (members of Macao in Milan). In all cases, participants will be endowed with the access to pilot specific Freecoin tools that will behave as for the rules identified after the analysis of qualitative data sets in D1.2 and D3.4 together with the design sessions that ushered in D4.4 and implementations sessions as for D5.5

In brief, in Spain we have a detailed framework, in Iceland the law is clear enough in order to implement Freecoin's digital tokens as business points (gift cards model) and not as bonds payable to the bearer, while in Finland there is the absence of regulation in a very small and informal pilot at Helsinki Urban Cooperative Farm. These are all green lights for the digital social currency experimentation in D-CENT (Italy is following with new regulation.) because in all contexts we will be operating either with much clarity on how complementary currency and the Euro relate to each other (Spain and Iceland – essentially escrow for both) or with no interaction at all with regulations nor with official monetary policy (Finland – like a videogame currency, for instance as for World of Warcraft's honor system and faction currencies).

2. Part 1: Towards a normative framework for the digital social currency².

In order to support the implementing of Digital Social Currency experiments to foster direct democracy in Europe, an adequate regulation to mitigate risks under different legal frameworks is essential.

On the one hand, complementary currencies fall within many different types of legislation which vary from country to country. The most recent literature on this field shows that mutual currencies in some countries are currently either not allowed or limited to the exchange of non-taxable items (Ruddick and Mariani 2013). On the other hand, there are other problems that may be defined “legal basics for complementary currencies”. For instance the current experiments though still largely pilot projects, already allow to identify some key legal issues which have to be considered:

- (1) issuing currency;
- (2) what laws apply to and put constraints on the organisations that administer community currencies; and
- (3) under what circumstances can employees be compensated with complementary currencies.

As we stressed in D3.4, the most relevant question is how coordinate the circulation and scaling of complementary currencies.

All these problems should be considered during the experimentation on D-CENT's Digital Social Currency pilots, that we described in the Annex I of D4.4, respectively, the decentralized complementary currency system for Your Priorities (Iceland), the decentralized application to be integrated to the Community Exchange System for Eurocat (Spain) and the Decentralized bottom-up social remuneration for Helsinki Farm (Finland) and Macao cultural workers in Milan (Italy).

In the following sections we will present two recent and important attempts to introduce a regulation able to support resilient monetary ecosystems:

1. The California Alternative Currencies Act (AB-129) that updates California Corporations Code Section 107 to clarify that the issuance and use of alternative currencies is not prohibited in California together with the California Virtual Currency Legislation (AB-1326) that aims to bring virtual currency businesses more clearly under the state's Money Transmission Act. The AB-1326, if it became law, would've gone into effect on July 1, 2016. It is currently in “inactive” status, and cannot be brought up again for consideration before January 4, 2016.

2. The French Law for the Economie Social et Solidaire (ESS, i.e. Social and Solidarity Economy), in which complementary currencies are explicitly considered in order to consolidate the economic model of ESS businesses.

We also stress both the risks and the opportunities that have been considered in the debates during the times that preceded the adoption of the laws, but also after their approvals.

²Stefano Lucarelli

3. Two Relevant examples of regulation: the Californian Alternative Currencies Act and the French Law for the *Economie Social et Solidaire* (ESS)

3.1. The AB-1326₃

The California Alternative Currencies Act (AB-129) updates California Corporations Code Section 107 to clarify that the issuance and use of alternative currencies is not prohibited in California. This is an important clarification. The existing language of Corporations Code Section 107 is ambiguous and outdated, and might be interpreted to prohibit the creation and circulation of alternative forms of exchange - including community currencies, virtual currencies, frequent flier miles, rewards point systems, and other widely used and emerging forms of exchange.

The Code Sections 107 reads: “No corporation, flexible purpose corporation, association or individual shall issue or put in circulation, as money, anything but the lawful money of the United States”.

The Chapter 74 of Assembly Bill No. 129 (AB-129) on January 15, 2013 proposed, therefore, to repeal the previous one. This law has been approved by Governor on the June 28, 2014.

Long before the introduction of digital currencies, in the United States and in California, various businesses have created point systems that operate as currency allowing the consumers to buy a retail item or pay for some type of service. Many communities have created "community currencies". These "community currencies" are created for a variety of reasons, some of which include encouraging consumers to shop at small businesses within the community or increasing neighborhood cohesiveness. "Community currency" has also become a form of political protest as some communities that use such currency do so in protest of United States monetary policies, or large financial institutions. Some "community currencies", to name the main examples, in California are: Barter Bucks Concord; Bay Bucks San Francisco, Berkeley Barter Network Berkeley; Berkeley Bread Berkeley; Central Pound Clovis; Davis Dollars Davis; Escondido Dollars Escondido; Mendocino SEED Fort Bragg.

The Chapter 74 of the Assembly Bill No. 129 makes clarifying changes to current law to ensure that various forms of alternative currency such as digital currency, points, coupons, or other objects of monetary value do not violate the law when those methods are used for the purchase of goods and services or the transmission of payments. Modern methods of payment have expanded beyond the typical cash or credit card transactions. Crypto-currencies, like Bitcoin, have gained massive media attention recently as the number of businesses has expanded to accept them for payment, as we deeply analyzed in D4.4 (see especially pp. 11-26).

The Assembly Bill goes on explaining that the original law derived from the California Constitution which was written in 1849; it was revised to move the currency provision to the Corporations Code in 1972. This provision has been untouched since 1972 (42 years). The bill acknowledges that, “Modern methods of payment have expanded beyond the typical cash or credit card transactions”. This is an important distinction that businesses, let alone states, have been having trouble grappling with. It’s our

³Lucia Bonacci and Stefano Lucarelli

opinion that for a State as large and influential as California to be recognizing this at such time, that other states could soon follow suit in attempt to draw investors and businesses into their area. California has tended to be a very liberal State in regards to new-found technologies, and it's no surprise that they would be first to embrace this industry.

Some time ago, specifically on February 27, 2015, Assembly Member Matthew Dababneh introduced AB-1326, a bill that seeks to “prohibit a person from engaging in this State in the business of virtual currency” without either a license or a special exemption from the State.

The bill would make it a crime in California to operate a virtual currency business without first registering with the commissioner of business oversight, satisfying all requirements, and paying an application fee of \$5,000. Businesses must also file audits and reports to the commissioner multiple times a year in order to prove solvency and know-your-customer records.

On March 23 the bill was referred to the Committee on Banking and Finance, where Dababneh also serves as chair. It was amended and re-referred to the same committee again on April 21. The bill was approved with a vote of 8-2, and now it's headed to the appropriations committee for another review. This extra step is common for “all bills with any fiscal impact,” according to the committee website. If they approve the bill, it will reach an official vote on the California Assembly Floor. After that, it will also need to be passed by the State Senate and signed by Governor Brown before becoming law.

AB-1326 is a comprehensive piece of legislation that would place strict requirements on businesses in the digital currency space. The California law is moving through the traditional legislature by attempting to modify the state's Money Transmission Act.

It broadly defines a “virtual currency business” as any activity involving the storage of digital currency on behalf of others; the exchange of fiat money for digital currency and viceversa; and even the exchange of one type of digital currency for another. It applies to all businesses and organisations who perform these activities in relation to a California resident.

Among the various rules contained in the bill, businesses must:

- Pay a non-refundable \$5,000 application fee to the Department of Business Oversight (DBO)
- Maintain capital reserves of an arbitrary amount determined by the DBO commissioner
- Verify that all representatives and employees are of “good character and sound financial standing,” and keep records of these reviews for three years
- Not allow representatives or employees to conduct virtual currency business for outside, unlicensed parties
- Be aware that the DBO commissioner can examine the business or any branch office, even if outside California, at any time
- Provide any accounts, books, correspondence, memoranda, papers, and other records at the DBO commissioner's request
- Notify the DBO within five days in the case of bankruptcy filing; felony charges against a manager, director or executive officer; or other major legal developments related to the business
- Retain all records relating to compliance with this license for at least three years
- File an annual audit report to the commissioner within 90 days of the fiscal year-end

- File quarterly reports detailing balance sheets, income, cash flows, and changes in shareholders' equity.

The DBO commissioner can take punitive action — including a \$1,000 fine per day — against any virtual currency business deemed to be in violation of these rules, even if that business has not applied for a license. This gives California a large amount of regulatory authority over such organisations, regardless of whether they have the ability or desire to comply with AB-1326. There is no planned comment period for California residents or businesses to offer their thoughts on the bill; if the California legislature approves AB-1326 and Governor Brown signs it, the bill would become law overnight in America's most populous state. California residents and businesses who would be affected by the bill, such as Coinbase in San Francisco, can contact their State assembly members in order to voice their thoughts before it reaches a vote.

Some have seen this measure as the first step towards bitcoin regulation. But the Bill AB-129 specifies that “bitcoin is not under any ban of issuance or circulation” and, therefore, is legal for payments and transactions. However, it doesn't establish an obligation to accept bitcoin as legal tender. At the same time, there are many protests and petitions created to try to withdraw this legislation which would, in fact, undermine the rights of the people, who can innovate and build “legitimate business without restraint” as stressed by Nozomi Hayase (Clarke, 2015; Perez, 2015a).

For example, Buttonwood SF's founder, John Light, has promoted an online petition against AB-1326⁴, where it is sustained that when the bill will be passed, then digital currency companies will be prohibited from operating, unless they have been given a license by the DBO or have been excused by the DBO (Perez, 2015a). Consequently a legislation like AB-1326 would have a real negative impact on people's lives. AB-1326 would undoubtedly harm California's economy by closing down accessible avenues for buying and selling Bitcoin and signaling to Bitcoin entrepreneurs that they are not welcome, unless they pay exorbitant fees and report invasive information about their customers to the State.

John Light himself wrote that “There is no logical course except resistance against such policy should it come to pass, and the acceleration of development and use of anonymity measures to protect bitcoin users such that anonymity becomes an element or option within the protocol to guard against the excesses of coercion and statism” (Gallagher, 2015).

On the 27th of April, 2015, the California Committee on Banking and Finance approved the AB-1326 Bill which regulates decentralized digital currencies such as Bitcoin.

The legislation is pending further approval by the California State Floor. The contents of the bill have revealed an extensive set of provisions set out to regulate businesses that operate with Bitcoin and other decentralised digital currencies. Some have compared it as being similar to the proposed NY BitLicense (Perez, 2015b). Particularly, Evander Smart (2015) sustained: “As if taken from New York's BitLicense directly, Bill AB 1326 will make compliance as difficult and as intrusive as possible. Highlights include asking for highly irrelevant information from all partners, officers or company managers like educational background, ten years of employment history and work address”.

⁴ Cfr., this video on YouTube for saving Bitcoin Businesses in California withdraw AB-1326: <https://www.youtube.com/watch?v=elqpI-H6RpA>

3.1.1. Risks

As we have already mentioned, Buttonwood SF's founder, John Light, has promoted an online petition against AB-1326. If the bill is passed, then digital currency companies will be prohibited from operating, unless they have been given a license by the DBO or have been excused by the DBO.

Following the arguments sustained in petition, we may stress that under the new regulations, prospective applicants will have to register by paying a \$5,000 non-refundable fee. They will also have to provide the agency with certain identifying information as well as keep a predefined amount of money in "investment-grade permissible investments".

While speaking about the challenges crypto-currency businesses will have to face if the bill is passed John Light himself explains: "It costs \$5000 just to apply for the license, to say nothing of the actual cost of the license itself and related compliance costs, which would price out all but the richest entrepreneurs and businesses that seek its protection and effectively put all of the traders at my meetup out of business".

This bill, and others which seek to raise the barriers to entry for bitcoin businesses, would harm both Bitcoin consumers and entrepreneurs, and should therefore be withdrawn.

Consumers will be harmed because there will be less Bitcoin companies competing for their business, which could lead to both increases in prices and decreases in service quality due to a lack of competition. Entrepreneurs will be harmed because the barrier to entry will be raised for those who wish to engage in the as-yet undefined "business of virtual currency."

As mentioned, the bill defines "virtual currency business" as "maintaining full custody or control of virtual currency in this State on behalf of others." But the bill doesn't explain what it means to have "full custody or control" of a virtual currency or what it means for a virtual currency to be located "in this state," and the drafters have so far refused to further define these terms. As it is, this bill could be applied far too broadly, such as to smart contracts.

Also EFF (Electronic Frontier Foundation) has been defending the rights of the digital world, opposing the bill and helping to strip out some of the worst elements of the initial text.

The first point is that the regulation is premature and digital currency is an industry in its infancy.

While they sympathize with the ideals behind the legislation—protecting consumers— they fear this bill will have unintended long-term consequences that hurt consumers more than it helps. We don't know what the future of cryptocurrencies will look like, but this legislation locks in a burdensome regulation before we know either where the technology is headed or what its likely uses will be (Reitman, 2015).

In addition, having different regulations for cryptocurrencies in every State will create confusion for consumers.

Strong State laws are often appropriate and can help establish rights for individual consumers—such as in the case of data breach notification and health privacy laws. But banking regulation is already an amalgamation of confusing standards, as Rose Marie Kushmeider explains: "the overlap in tasks among federal regulators and between federal and State regulators, particularly for banks, creates a confusing system that no one building a system anew would want to duplicate" (Kushmeider, 2005).

The other problem is that the application requires irrelevant data from the applicants, and applicants can be denied a license with no explanation with limited opportunity to appeal.

To qualify for a virtual currency license, applicants have to turn over extensive data. For any entity applying for a license, the following must be provided for every officer, manager, director, or “person that has control”.

A lot of this data simply isn’t relevant to whether a virtual currency is well-run and protecting consumers. The rule requires applications to include convictions for non violent drug offences, peaceful protests, or reckless driving. Being a college drop-out might also crop up.

They then raise: Will these things bar the applicant from receiving a virtual currency license? Will having five different employers in a 10-year period be a black mark on an application? Nobody knows. Because while the virtual currency license is very clear on the data that must be handed over to the commissioner, there’s little information about why an application could be rejected (Reitman, 2015).

This implies that the commissioner has complete discretion to revoke licenses.

The commissioner can revoke a license for a wide range of reasons. This means the commissioner, at her sole discretion, can choose to favor some virtual currency services over others, which builds a lot of ambiguity into the bill.

The same ambiguity into the bill is in relation with who will even qualify for a provisional license and how it will operate. The bill has a carve-out for small businesses and start-ups, whereby they can get a provisional license for two years for only \$500 (instead of the typical \$3,500 application fee and \$2,500 renewal fee) and the commissioner has an amazing amount of discretion with the provisional license.

To sum up what has been said, critics believe that the legislation is technically inaccurate. They also stress that the legislature should carefully observe the landscape as it develops.

In the meantime, they consider that there are immediate ways to protect consumers. This could include public education campaigns, working with virtual currency services to improve security practices to avoid malicious hacking, and convening virtual currency companies to help create self-regulatory standards that prioritize protecting consumers, privacy, and freedom.

3.1.2. Opportunities

The latest definition of California virtual currency business is the following:

“(c) Virtual currency business” means the conduct of either of the following types of activities involving a California resident: (1) Maintaining full custody or control of virtual currency on behalf of others. (2) Providing conversion or exchange services of fiat currency into virtual currency or the conversion or exchange of virtual currency into fiat currency or other value, or the conversion or exchange of one form of virtual currency into another form of virtual currency”.

The California’s definition seems heartening, because there are two more important activities: custody and exchange.

“Maintaining full custody or control” is the right approach, and this means that, as the funds of consumers may be missing, it makes sense to have a regulation on the protection of consumers themselves.

“The word full is there, and that matters with respect to digital currency because with multi-sig technology custody could be divided”. (Van Vankelburg 2015)

California’s approach will both protect consumers from any risk inherent in true custodians while still promoting innovation in multi-sig security services. New York’s definition lacks this sensitivity, because it’s drafted like a catch-all.

Unlike New York, California’s AML has no components because its digital currency license would mirror every other state’s money transmission license; it would only deal with setting consumer protection standards and it would leave AML policy to the Federal government, the Department of Treasury, and FinCEN specifically.

On July 8, 2015, many companies of California and many supporters of the virtual currency – BitGo, Bitnet, Blockstream, Mirror - wrote a letter to the senators Block and Vidak, giving the congratulations to the Decree Law AB 1326.

According to them, this reform exempts “holders of Money Transmission licenses and eliminating unnecessary redundancy. Such licensing already addresses much of the risk from a consumer standpoint, as most of the services that are holding full custody of users’ digital currency funds interact with US Dollars. We are also pleased that the authors removed from the last draft the second half of the definition of virtual currency business relating to “conversion or exchange,” as it would have created licensing requirements for many innovative companies that do not pose consumer risk”.

They took the opportunity to note a few additional issues, like the definition of “full custody” or “control” that is limited to unilateral uses. They believe that if a business is not taking unilateral custody or control of funds, it shouldn’t be subject to regulation.

They would like to continue to work with the senators on ways to expand it and grow the ability of small startups to innovate and flourish.

In fact, California is the home for much of the innovation in Bitcoin and blockchain technology and also for many major tech companies.

3.2 The French Law for the Economie Social et Solidaire (ESS) ⁵

The spread of Local Complementary Currencies (henceforward MLCs, Monnaie Local Complémentaires) projects that was experiencing the French territory had shown that on this subject the legal system, and banking in particular, showed the limits that time so complex they could no longer afford.

Even more so everything was valid in a social and economic context as in France where the realities of MLC system had found in public authorities an important role in setting them up. Indeed it is undeniable that the lack of legislative clarity and the resulting lack of confidence in the potential users is one of the major limitations, which the MLC system has to face. The reference groups, the different institutional and associative realities that know the territory and local problems, they saw in the MLCs system a tool

⁵Alfonso Giuliani

able to innovate and stimulate local economies strongly marked by the financial and economic crisis. The “MLCs project holders” have tried to resolve this serious problem by inserting the legal recognition of the MLCs in the reformulation of the Law on Social and Solidarity Economy (henceforward ESS, Economie Social et Solidaire). It is for this reason that MLCs project holders have tried to resolve this grave problem by inserting the legal recognition of the MLCs in the legal and institutional framework of the Law on Social and Solidarity Economy.

The ESS brings together companies looking to conciliate solidarity, economic and social utility performance. Economic player, the ESS represents 10% of GDP and nearly 12% of private jobs in France. This sector has about 200,000 businesses and structures and 2,36 million employees.

With ESS law of July 31, 2014 the social solidarity economy spent to scale.

For the first time, this law defines undertaking specific mode. It also gives small businesses, which make up most of the ESS sector, ways to develop.

Social Economy legislation meets five objectives:

1. recognize ESS as a way to undertake specific (this passage understand the creation of a legal basis from which it can be developed a new specialized financing oriented to ESS enterprises and to financing social innovation).
2. Strengthen the policies of the sustainable local development;
3. Strengthen the network, the governance and the tools of financing of the actors of the SSE;
4. To cause a cooperative shock;
5. Restore some power to act to the wage earners.

It is in this context that the promoters and legislators of the law on ESS have wanted to include the legal recognition of local complementary currency system; a legal recognition that has had a complex and articulated legislative process. In this framework had been instrumental the positive experiences of locals currencies, the studies that had corroborated the currency validity and, last but not the least, the activism of citizenship. In particular, the citizenship's interest for managing of a currency linked to the territory. The ESS law is one of the cornerstones which support the expansion of a 'sustainable economy and attentive to the needs of the community. However the project can't take into account the difficulties that could appear. And in this case it will be necessary to review, improve and innovate the aspects and prerogatives not foreseen by the ESS law of July 31, 2014, because some aspects can be highlighted only by experience.

It is good to retrace the steps that have led to this law and the later interventions after July, 2014.

On July 24, 2013 the draft law ESS was presented in Cabinet: the bill contributes to the government battle for employment by developing a high-potential sector.

On November 7, 2013 the text was adopted in first reading by the Senate. The vote on the first article of the law ESS is a turning point for the economic development of companies and industry organisations.

The parliamentary process of the law began with the approval of the first article of the draft law to the ESS by the National Assembly after a discussion in public session on May 14, 2014.

After a series of parliamentary steps the ESS law was promulgated by the President of the Republic on 31 July 2014 and published in the Official Journal on August 1, 2014. ⁶

The fact that the MLCs have been recognized within the legal framework of the ESS suggests that the French authorities themselves deem that the implementation of the MLC system is crucial for this sector. In this framework it is also recognized that the establishment of MLC system often requires funding that often the bearers of these projects have not. The network of ESS, in this sense can be an instrument of social innovation and give a significant boost to the different systems of MLC.

Carole Delga, Secretary of State for Trade, Crafts, Consumer Affairs and the Social and Solidarity Economy (ESS), has promoted three new financing, operated by Bpifrance, for the development of the ESS and social innovation at the first steering committee of the Investment Funds in Social Innovation (henceforward FISO, Fonds d'investissement dans l'innovation sociale), co-chaired on December 8, 2014 with Marie-Guite Dufay, Franche-Comté region's President, Vice President of Bpifrance and Vice President of the Association of Regions of France in charge of the ESS. The three new funding schemes are the following ones:

- The FISO, whose creation was announced in May, 2013, by the President of the Republic at the end of Assizes of entrepreneurship, it will be co-funded equally by the State and regions and managed by Bpifrance. With a total public capacity of € 40 million, it will finance in the form of repayable advances socially innovative projects, corresponding to social needs unmet by the market or by public policies, for "investment tickets" a minimum size of 30 000 euros. The implementation of FISO be done in two phases: a first phase of experimentation with eight regions (Franche-Comté, Centre, Picardie, Nord-Pas-de-Calais, Provence-Alpes-Côte d'Azur, Languedoc-Roussillon, Rhône-Alpes, Lorraine) mobilize the budgetary resources of the State, up to 10 million; Once evaluated the results of this experiment, a second tranche of € 10 million will be mobilized to expand the FISO to more regions. Future agreements with other regions experimenters will be signed in the first quarter 2015.
- The PESS (Prêts pour les Entreprises sociales et solidaires [Loans for the Social Enterprises]): Bpifrance disseminates these bank loans from the ESS enterprises, as defined in Article I of the ESS law, through partnerships with the traditional banking system and the solidarity funders specialized. Over a period of 5 years, with a grace period of one year, such loans could reach amounts between € 20,000 and € 50,000, increased to € 100,000 in case of intervention of the Region. They will finance the expenses related to business development or implementation of an investment program. This program has a commitment capacity "Bpifrance" initially targeted to

⁶ On 14 May, 2014, the National Assembly adopted the first articles of the draft law to the ESS, after a discussion in public session at the National Assembly on Mai 13, 14 and 15, 2014.

On May 20, 2014, the National Assembly passed the bill on the ESS: 314 deputies voted in favor, 165 deputies voted against and 50 abstained.

On June 5, 2014, the text was adopted in second reading in the Senate. The second reading of the text to the National Assembly took place in Committee on June, 17 and 18, 2014, and then in public session on July 3, 2014.

On July 3, 2014, the National Assembly adopted on second reading the draft law on the ESS.

On July 21, 2014, the legislation ESS was finally adopted by the National Assembly.

the tune of € 50 million for fiscal years 2015 and 2016, more than 100 million euros in loans, integrating the co-financing.

- Bpifrance mobilize via fonds de fonds, an equity investment capacity in ESS enterprises and companies seeking a social impact, with a total capacity of about a hundred million. A round table is being finalized in the case of investment funds project in growth cooperatives (project says “Impact coopératif”[Cooperative Impact]), in which the Cooperative Credit and the General Confederation of Cooperative and Participative Society (henceforward SCOP Société coopérative et participative) are committed. The round table found so far reported firm commitments amounting to at least 50 million euros.

On November 1, 2014, right to pre information: to the entry of the decree law specifying the implementing rules of the new law prior information of employees in case of transfer of their business.

With a decree December 31, 2014 and then January 1, 2015, the new status of the priming SCOP (in French is SCOP d’amorçage), that enables employees to gradually increase their share in the share capital, and thus promote business recovery in the form of SCOP, became effective: companies develop into production cooperatives.

The notice of the decree No. 2014-1758 of December 31, 2014 relating to the boot device applicable to production cooperatives SCOP specifies that the law of July 31, 2014 on the SSE, in particular established a provisional statute of the SCOP, allowing a non-cooperators or partners to hold temporarily more than half the capital of a SCOP. All the partners not co-workers makes a commitment to give to sell or to obtain the refund of a number of securities being enough for allowing the partners co-workers to hold at least 50 % of the capital of the society at the latest December 31st of the seventh year according to that of the transformation in SCOP. It is in this sense that the decree states that in case of conversion of a co-operative society of production, this commitment must be included in the statute of the SCOP and that a copy thereof shall be submitted to the tax authorities. This is necessary to benefit of the fiscal advantages specific to the co-operatives societies of production.

This article is presented as adjustment of the previous Article 27 of the Law No. 2014-856 of 31 July, 2014, about ESS.

More precisely, Article 27 indicates about SCOP that enrolled in the business transfer process by transformation Scop which it nevertheless makes exceptions:

The partner not co-workers can hold more of 50 % of the capital at the end of the transformation in Scop and it is true during a deadline of 7 years. During the transformation, the partners not co-workers will have to make a commitment to give in or to ask for the refund of their securities at the latest at the end of this deadline of 7 years. The methods of implementation of this commitment will be fixed by decree. The wage earners can thus during this deadline be minority in the capital. On the other hand, the wage earners will necessarily have to hold the majority of the voting rights in general assemblies.

On January 29, 2015, in the framework Program of Investment for the Future (henceforward PIA Programme d’investissement d’avenir), a new call for projects was launched in favor of action ESS, named Financing of the social and solidarity economy.

This objective requires the contribution of quasi-equity, primarily through equity loans or associative contributions with supplemental contracts. This action has a hundred million.

The new call for projects launched in this context is for players in the ESS of the following areas: ecological and energy transition; tourism; the sharing economy; the revitalisation of rural areas.

The decree n° 2015-90 of January 28, 2015, fixing the amount provided for in Article 13 of Law No. 2014-856 of July 31, 2014 about ESS.

The article 1 indicates “The amount provided in Article 13 of the Law of July 31, 2014 referred to above is set at one hundred million euros excluding tax”.⁷

The article 2 indicates “To determine the annual total amount of their purchases, contracting authorities and the contracting entities concerned with regard to the contracts concluded in application of the “code des marchés publics” (the code governing public works) or the [...] provisions of June 6, 2005 and partnership agreements concluded in application of the provisions of the June 17, 2004 Ordinance or the Articles L. - 1414-1 and following ones of the general of the General Local Authorities Code”.⁸

The article 3 indicates: “The Minister of the Interior, the Minister of Economy, Industry and Digital and the Secretary of State for Trade, Crafts, Consumption and Social Economy are responsible, each in regards to the execution of this decree, which will be published in the Official Journal of the French Republic”.⁹

On May 22, 2015, “Delta Méca”, an industrial engineering company in Couëron (44), is the first boot SCOP in France.

On June 23, 2015, it will approved a consolidated version of the law ESS of July 31, 2014.

French Legislation about ESS of 31 July, 2014 – Summa

The Law consists of 53 articles divided into 8 titles:

The Title I is devoted to the definition of ESS and structuring policies contributing thereto, nationally as locally. Article 1 defines the criteria and conditions for membership in the social and solidarity economy. Article 7 reform "entreprise solidaire (*Social enterprise*)" which opens right to present two financial counterparties. Articles 9 and 10 concern the socially responsible about public procurement and grants as part of the social economy;

Title II also includes provisions facilitating the transfer of businesses to their employees. The title consists of two articles: article 11 for the information of employees prior to the transfer of business assets and the article 12 for the

⁷« Le montant prévu à l'article 13 de la loi du 31 juillet 2014 susvisée est fixé à cent millions d'euros hors taxe ». Our translation.

⁸ « Afin de déterminer le montant total annuel de leurs achats, les pouvoirs adjudicateurs et les entités adjudicatrices concernés prennent en compte les marchés conclus en application du code des marchés publics ou de l'ordonnance du 6 juin 2005 susvisée et les contrats de partenariat conclus en application des dispositions de l'ordonnance du 17 juin 2004 susvisée ou des articles L. – 1414-1 et suivants du code général des collectivités territoriales ». Our translation.

⁹ « Le ministre de l'intérieur, le ministre de l'économie, de l'industrie et du numérique et la secrétaire d'Etat chargée du commerce, de l'artisanat, de la consommation et de l'économie sociale et solidaire sont chargés, chacun en ce qui le concerne, de l'exécution du présent décret, qui sera publié au Journal officiel de la République française ». Our translation.

information of employees in case of transfer of shares, or securities giving access to the majority of the capital;

Title III includes provisions supporting the development of cooperative enterprises in accordance with the values that characterize their organisation and governance modes;

Title IV on insurance companies, mutual and pension funds. In continuation of the international agreement which generalized the mandatory health coverage for all private sector employees, the article 34 allows the realization of co-insurance operations between insurance organisations under different regulations: Code of mutuality, the Insurance Code and the Code of Social Security;

Title V is about the right of associations. The article 40 reforms associations as to improve the attractiveness of securities associations to encourage their use by associations. Section 43 extends to general interest associations the ability to receive gifts;

Title VI is on foundations and endowment funds. The article 45 extends to foundations under nine employees the benefit of associative employment check;

Title VII concerns the insertion sector by economic activity;

Title VIII contains various provisions, including the requirements and effective date of the systems put in place by this bill.

3.2.1. The legislative framework for French local complementary currencies

The Article 16 of ESS law No. 2014-856 of July 31, 2014, which deals local currencies, recalls some other articles of French Monetary and Financial Code. Specifically, the chapter I of the title I of book III of the French Monetary and Financial Code is supplemented by a section 4: Section 4 “Les Titres de Monnaies Locales Complémentaires ”[Titles of Complementary Local Currency, TCLC]

More precisely as indicated by Romain Zanolli (2015, pp. 63-68) the MLCs issues are assimilated at the legal currency under two articles, Article L. 311-5 and Article L. 311-6. These two Articles introduce also the dual legal regime to which the MLCs must satisfy and which are interbank (Art. L. 311-5) and banking laws (Art. L. 311-6).

Article L. 311-5. « The titles of MLCs can be issued and managed by one of the persons quoted in the first article of the N° 2014-856 law on July 31, 2014 relative to the SSE, of which is the only social object”.¹⁰

« Art. L. 311-6.- The issuers and the managers of the MLCs titles are subject to title I of the book V, when the issue or the management of the titles derive from the banking services of payment quoted in the Article L. 311-1, or in the Title II of the same Book when they derive from payment services within the meaning of Article L. 314-1 or the electronic currency within the meaning of Article L. 315-1. ¹¹

¹⁰«Art. L. 311-5.-Les titres de monnaies locales complémentaires peuvent être émis et gérés par une des personnes mentionnées à l'article 1er de la loi n° 2014-856 du 31 juillet 2014 relative à l'économie sociale et solidaire dont c'est l'unique objet social.». Our translation.

¹¹«Art. L. 311-6.-Les émetteurs et gestionnaires de titres de monnaies locales complémentaires sont soumis au titre 1er du livre V lorsque l'émission ou la gestion de ces titres relèvent des services

The Articles approved respect the French Monetary and Financial Code (L.111-1) for which the local currencies remain a complementary currency of the legal French currency: the euro. The recognition of MLCs such as a currency (like for an electronic currency) suggests that it can be used, not like a good, but like a new instrument of payment. The legal supports of this instrument are the titles. So after the recognition of the TLCCs, they can be used to pay goods and services whose price is formulated in euro. This allows that TLCCs can be accepted by the authorities and the public establishments to pay taxes and duties (Zanolli, 2015, p. 64). The fact that recognition of the TLCCs are based on the complementarity shows two aspects of them: On one hand they are at the same level of euro. In the other hand the acceptance of this kind of currencies is in the power of beneficiaries (Ibidem).

The faculty to issue “Titles of monetary nature” by the actor of ESS law is a right which must answer to two conditions. 1) The subject how issue the TLCCs must take part to the ESS network. 2) The TLCCs don't to be in the fields of the Article L311-6 of the banking law (Ibidem).

The recognition of TMLCs such as a monetary instrument, had push the Direction générale du Trésor et la Direction générale des Finances publiques (Directorate General of the Treasury and General Directorate of Public Finance) to issue some conditions for the TLCCs: 1) the guaranty of traceability of exchanges and the convertibility in Euro. 2) The neutrality on public finances. 3) The regulation of accounting to control monetary flows. 4) The surveillance to avoid that these TLCCs became instruments for the fiscal frauds. (Magnen, Fourel and Meunier, 2015, p. 55).

As described by Pillard (2015, p. 74), the article reported (Art. 311-6), that has to do with the policy of a limited network of people, still recalls Article L. 521-3 of Code Monétaire et Financier, concerning the conditions for exemption from the statute of payment institutions.

The same standard of limited network is also employed by Directive 2009/110 on electronic money, transposed by Law 2013-100 of January 28, 2013 (Pillard, 2015, p. 74).

Moreover, according to Pillard the TMLC seem resuming an old and little used branch of civil law: the tickets at the standard bearer that are lawful provided that it does not aim to replace paper money legal tender (Article 442-4 of the Criminal Code). The legal characteristics of such notes, namely the transferability without formality, lack of solidarity successive carriers and unenforceability of exceptions realise legally extremely simplified mechanism for the movement of MLC securities.

3.2.2 Risks

The approval of the ESS law allowed a legal recognition to the MLCs. In the medium-long run, different local systems will have the opportunity to show the real impact of this legislation. The research on the French MLCs by Magnen, Fourel and Meunier (2015a) has been designed by means of 68 questionnaires

bancaires de paiement mentionnés à l'article L. 311-1, ou au titre II du même livre lorsqu'elles relèvent des services de paiement au sens du II de l'article L. 314-1 ou de la monnaie électronique au sens de l'article L. 315-1. ». Our translation.

sent to the relevant MLCs' stakeholders. The main aim of the research may be summarised in the following points:

- having detailed information on the operating methods provided in the different local systems;
- stressing the different specialties in the most advanced French MLCs;
- showing the difficulties and the obstacles faced by the main actors involved in the phase of introduction of MLCs.

First and moreover we will present the obstacles that have been stressed in Magnen, Fourel and Meunier (2015a). One of the difficulties that characterizes French MLCs is that, at the moment, their economic incidence is actually limited, although MLCs are actually increasing and consolidating in the entire France.¹²

The interviews shows that, given the statistical sample composed by the 17 MLCs which are actually working and given the 500,000 citizen related to these specific experiences, then the average amount of MLCs users is 414 and the average amount of prestataires is 86. Authors can conclude that the density of the MLCs indicates that a strong potential of growth exists both for the greater implementation in the communities and for the increasing size of the network between businesses units.

Numbers of users and providers in MLC investigated April 2014). Source: Magnen, Fourel and Meunier (2015, 46).

	Minimum	Median	Average	Maximum
Number of users	20	150	414	2,700
Number of providers	5	55	86	500

The complementary currency that circulates in the different case studies considered by Magnen, Fourel and Meunier (2015) is divided in the following way. At the matter of facts, the monetary mass significantly varies.

Monetary mass in circulation in MLC investigated (April 2014), Source: Magnen and Fourel and Meunier (2015, 46).

	Minimum	Median	Average	Maximum
Monetary mass	1,600	11,525	26,139	24,5000

The limited diffusion of MLCs may be explained by considering that they are only partially known by French citizen. Consequently French citizen have not yet developed the necessary confidence in MLCs. Such a situation may be considered as a paradox: indeed the flourishing of MLCs systems in France is mainly based on initiatives supported by civil society. Following the research on Sol-Alpin (loyalty card) by

¹²See <http://monnaie-locale-complementaire.net/france/> .

Blanc and Fare (2010), Magnen, Fourel and Meunier (2015a) indicate the following variables as explanatory of the lack of confidence:

1. the 23-34 old-age of the citizen;
2. the rate of education. It seems essential that the 75% of citizen had a post-secondary school degree;
3. the social-economic context where citizen actually live, that should be characterized by a middle and high income.

For this reason one of the aims of the study was primarily the fact that the public authority recognized MLCs as a legal instruments. It is also interesting that French public authorities declared to be always interested in projects aimed to implement MLCs. Magnen, Fourel and Meunier (2015a, pp. 57-59) have stressed 5 major risks that a MLC system may encounter:

1. Reserve Fund: people who participate to a system of MLC can be reimbursed in euros of their titles in the MLC, at any time and also in case of system's failure. In this case, the MLC system must have a banking account, which cannot be allocated for other purposes also if the Authority (Contrôle Prudentiel et de Résolution, ACPR) may authorize to do so.
2. Money falsification: printing costs of the MLCs will increase in order to preserve a high rate of assurance.
3. Money laundering: the phenomenon of lawlessness, especially petty crime we add, could permeate a system of MLC, if the system will reach a meaningful magnitude.
4. Taxation: many authors that have collaborated to Magnen, Fourel and Meunier (2015b) stressed the hypothetical risk that MLCs may improve illegal works, especially unreported employment. At the same time, they recognized the absence of data which are necessary and sufficient to confirm or to refuse the hypothesis. Other problems have been underlined about the Value-Added Tax (TVA, Taxe sur la Valeur Ajoutée): the issue and purchase of MLCs in euro must be considered as a financial asset that is free from TVA, at least until it is a service and a purchase of goods for the benefit of those who buy MLCs. At the time of the issuing of MLCs, there is no direct benefit to the issuers.
5. Inflation. Magnen, Fourel and Meunier (2015a) argued that the inflation is at the present time a zero-risk. Both the size of the circuits and the amount of the local complementary currencies in each system are actually too little in order to stimulate a pressure on the level of prices. Secondly, MLCs that circulate are counter-balanced by the reserve funds that, in most cases, are a 1=1 exchange rate. Consequently we are not facing a money creation in a strict sense.¹³

¹³ In the case of Sol-Violette, project-wearers project as Andrea Caro, they propose to *prestataire* instead of doing promotions that have a tendency to drive prices down, to give the Sol-Violette to be able to increase the purchase of the users / customers. This, according to Caro, could be a collective response to falling prices and therefore deflation. This proposal, according to Caro, could be a collective response to falling prices and therefore deflation. Excerpts from an interview given by A. Caro to Stefano Lucarelli and Carlo Vercellone in May 2015. See also Lucarelli et alii (2014), p. 29-35.

3.2.3. Opportunities

Magnen Fourel and Meunier (2015a) argued in which sense MLCs systems may be described as a potential system of trade. According to the authors, the premise of an economy able to favor quality over quantity is the following one: a productive system for the community managed by the community. An economy of proximity that reduces the distance between producers and consumers with particular attention to environmental sustainability and solidarity among citizens. A MLC system may include instruments in favor of the weaker people, among them a favorable exchange rate between the higher currency and the MLC (for example, you can imagine 1 euro = 1.2 MLC). In this way is possible to realize a “targeted” greater purchasing power. A system of MLC should be also a system that can cope with the limits of the classical funding channels and strengthen the resilience of a community facing an economic crisis.

The reading of the questionnaires received from actors engaged in MLCs of Metropolitan France, defined by the authors as “classic”¹⁴, it first pointed out that the planning and putting in place of a MLC system requires a work that ranges from a year and a half to two years. The main issue emerging from the survey is that most of the initiatives related to the implementation of the MLC system are bottom-up processes. Half of the projects are developed by existing associations, while a third is still driven by citizens establishing specific associations to create a MLC system. Specifically, the investigation shows that the MLCs in circulation or still in the planning stage are divided as follows: 50% by pre-existing associations, 34% by citizens that institute specific associations, 9% by public authorities and remaining 7% by other. The percentages just mentioned therefore, they bring out the importance of civil society in establishing a system of MLC. The questionnaires show therefore, that only two systems of MLC did not receive direct support from the citizens. Different is the question for the MLCs (8%) which instead had direct support by public authorities in them local dimension (2/3), regional and supranational.

Even more interesting for the purpose of the research, it is that most of the MLCs investigated resulted to be linked to initiatives of non-profit associations that respond to the 1901 law on associations. It is necessary highlight that only one of these MLCs is linked to public institutions of credit and social aid.

The 1901 law on associations refers to one of the main issues raised concerning the different systems of MLCs. The fact that non-profit associations are not subject to taxation, according to critical voices, could create a gray area from a tax and labour law standpoint, as we shall see later. Despite this, only one-fifth of the structures presented to the authorities a request for tax exemption under Article L. 511-7 of the Monetary and Financial Code. Tax exemption can be given to companies that provide services and banking instruments for the purchase of goods and / or services within the enterprise itself or between business partnerships between companies or as it is limited network of people.

During the investigation, the majority of MLCs circulated as paper money, which according to some authors, in addition to the lowering of costs, facilitates a greater re-appropriation. In the same time, the paper money, almost pedagogically, could be seen as the currency of and for citizens. The decision to

¹⁴ Among the 37 questionnaires received, 32 relate to the MLCs that Magnen, Fourel and Meunier, define as classic, that is, “all those projects that concern primarily of trade in goods and services between citizens and merchants”. Among these 32 MLCs, 17 they circulated, while the remaining 15 MLCs, at moment of survey, these were still in planning.

circulate in paper money as evidenced by those who manage the Sol-Violette allows greater social inclusion (for its ease of use). Paper money, in addition, allows for improved management of the currency among those who have had trouble getting bank. Conversely, a number of interviewees highlight that paper money has a higher difficulty of management (higher costs) and also problems of traceability and falsification of currency that could fuel illegality.

Magnen, Fourel and Meunier, indicates that the 75% of the associations interviewed and engaged in MLCs circulation imagine or would prefer the use of dematerialized coins through technological support (firstly smart-phone). According to the investigation, the *prestataire*¹⁵ and users would see positively the possibility would see positively the possibility of bank transfers. All this aspects have non-sustainable costs for the (great) majority of MLCs systems. Another of the important information that emerged from the questionnaires is linked to the fact that the majority of members of a MLC system thinks that receiving part of their wages in local currency, subject to agreement between the parties, can be positive for the local economy.

The MLCs, as indicated in the questionnaires, could be important forms of funding for ESS¹⁶ stressing however management and legal difficulties associated with them. The local dimension, territorial sensibility intrinsic (environmental sustainability, ethic values of the projects, etc.) in a MLC system is perceived by the interviewees how an opportunity that a “classic” banking system not guarantee. In fact, one of the models used as a reference by those interviewed is that of community banks in Brazil (see moreover the case of Banco Palmas)¹⁷. This model considers that consumer loans at zero interest may be granted directly in local currency and help the weakest members of society.

Another problem raised by the questionnaire concerns the essence of the MLC:

- 1) being a self-liquidating currency (in the meaning of the French notion *monnaies fondantes*). and/or
- 2) being a convertible currency.

Exactly a half of the MLCs that have been investigated are *monnaies fondantes*. The upright collected by the loss of value of currencies is used for the operation of the system. There are different rates and terms (deadline) adopted within each system in implementing the currency devaluation. These rates vary from 1 percent monthly to 1 percent every six months.

The conversion of currencies investigated is authorized in 60% of the case studies. Some systems require that the cost of MLC-Euro conversion be on average the 4% of the currency value. While the remaining percentage indicates that the currencies can be converted only by commercial partners and with a loss of conversion of 3% of the value of MLC in question.

As introduced, the MLC used in France all provide a reserve fund in Euros. This fund is linked to the amounts collected when the partners engaged in the different systems buying units of MLC. This amount is deposited in the bank guaranteeing all the partners of various MLCs to be re-established in Euros in case the MLC system shuts down.

¹⁵ The French term “*prestataire*” is utilized for indicate a trader, a company, association, professional people in adhering to the MLC Association and who are committed to improving their social and environmental practices.

¹⁶ Different authors, as Massimo Amato (2015), sustain that these agreements are desirable.

¹⁷ For more information, see de Freitas (2015).

No limit is imposed on the banks to deposit this currency into solidarity savings accounts and to finance in this way projects they deem worthy of funding. (Ibidem, 51).

We can conclude by recalling that, according Magnen, Fourel and Meunier (2015), the MLCs in order to be recognized as means of payment must comply with the legal system and under the centralized control of the competent bodies (ACPR and ministries). According to the authors, the MLCs can break free from such control and in order to be defined "MLCs free" - in accordance with the laws in force (Article L. 511-7 II and L.141-4 of the Monetary and Financial Code, Article 442-4 of Criminal Code) - they should circulate within a limited network of partners and then be used for the circulation of a limited number of goods and services. But this condition can lead to a situation of uncertainty and difficulty of the various systems of MLCs. The report, therefore, highlights how the MLCs have the potential that a classical system of trade has not. But many issues, as one can understand, still remain to be explored.

4. Some insights on democratic governance of economic alternative structures: Ostromian's approaches to money¹⁸

In order to develop the line of research that have been discussed in D3.2, the objective of this section is to present a review of works that analyse the monetary and financial institutions using an Ostromian¹⁹ approach.

It should be noted that from the very beginning the Ostromian approach was rarely used in the studies devoted to the analysis of complementary currencies (Servet 2015). In the contributions that will be reviewed, different ways of linking the categories introduced by Elinor Ostrom with reflections on the coin as an institution will emerge. The analysis will be undertaken switching from very specific case studies, like the one analyzed by Camille Meyer, to very general and ambitious reflections, such as those carried by Gaël Giraud and Jean-Miche Servet, to eminently theoretical research as the contributions of Jack Birner.

4.1 The contributions of Camille Meyer

Camille Meyer (2013a, 2013b) questioned whether the Ostromian principles aimed at defining common goods can be applied to the experience of Banco Palmas in Brazil. The experience of Banco Palmas has been analyzed in report D3.4. What must be noted here is that the model built in the poor region of Conjunto Palmeiras, later replicated in eighty communities, is based on a bottom-up process. Banco Palmas has created an innovative system of solidarity finance joining to the system of microcredit, a social currency circulating locally. The establishment of local networks of solidarity economy able to support employment and increase disposable income is therefore encouraged (Meyer, 2013a, p. 10). The study by Meyer considers the system of microcredit of production and consumption and the social currency, trying to analyze whether the types of governance and organisation adopted comply with the Ostromian principles that define the institutions of the common goods²⁰.

The analysis is developed in two phases: the first part analyzes the credit system of production and consumption in the light of the Ostromian criteria elaborated for the institutions of the durable common goods; it also puts the focus on links that the bank own with financial partners, in order to see if and how these interactions influence the management of the common resource, and if they are

¹⁸Eleonora Gentilucci

¹⁹About the categories introduced by Elinor Ostrom in order to analyzing the evolution of institutional commons we refer to the report D3.2 . See Vercellone et alii (2015)

²⁰Although Meyer speaks of the common goods, it is worth noting that Ostrom never uses the term of common goods, but the common pool resources or the commons. The two locutions have different meanings. One might assume that in this framework Meyer refers to the meaning of common pool resources that is the one that usually is translated as 'common goods'.

involved in its durability. The second part analyzes the system of social currency according to the same Ostromian principles; the monetary system is reviewed in the light of its social and financial sustainability.

Meyer applies respectively the management practices of common goods to the processes of governance of the credit system of the Banco Palmas (financial aspect) and of the currency system Palmas (monetary aspect). The following table shows the correspondences and differences between the microcredit of production²¹ appliances and of the Palmas social currency to the Ostromian principles of governance of the commons.

Ostrom's principles	Application on microcredit system	Application on Palmas currency
Clearly defined boundaries	-Limits: capital of the Banco Palmas (BP) from financial markets amounted to R \$ 3 million -Access: all residents can potentially collect a resource unit (size of units predefined)	Large scale currency : 46,000 Palmas in circulation and reserves
Rules regarding the appropriation and provision of common resources that are adapted to local conditions	Rules adapted to local conditions because : -facilitated access to credit for the poor households : no needs for bonding or guarantor -Immediately available credit (if loan is below 500 R\$) -Availability based on social relationships for the loans higher than 500R\$ (System Comitê de Aprovação de Credito) -Aid to facilitate the development of economic activities of survival.	Free and open access for all by: -micro-credit consumption -salary -barter Reais in Palmas Membership of more than 250 shops and variety of products available Discount for purchase in Palmas
Collective-choice arrangements	-The Forum Econômico Local (FECOL): citizens and representatives of local institutions are involved in the development of the broad guidelines of BP - The presence of BP in the district creates an interaction with the community (customers share their comments and suggestions)	Political debate on the role of money and the rules in the community in the FECOL Choice of name and form of Social Currency (SC). Currency as a symbol of the community
Monitoring	The behavior of appropriators is monitored by BP (verification of	Central emissions by the BP that monitor and control cash flows (inputs

²¹ When we talk about microcredit of production, it is referred to the productive activities that are financed by the Banco Palmas, such as *casa produtiva* (productive home), which serves to give people the means to enable them to independently produce goods and services for be sold; *revendedor* (dealer) for persons who want to buy products for resale; the credit as a *economia popular* (popular economy) intended for small businesses; credit *bolsa familia* and the *ELAS* project, the first is intended for women who are the most vulnerable people in society. These women are then automatically part of the project *ELAS* accompanying women in their productive activities.

	effective payment of the monthly payments) and external loan officer (recall visit).	and outputs) Requiring a Reais reserve currency: the <i>lastro</i>
A scale of graduated sanctions	Only in the case where the borrower shall constitute evidence of bad faith: - The neighbors are informed of the lack of payment and the behavior of the person who has taken the loan (borrower) -Her nom is publicly disclosed - Her name is inscribed in the Serviço de Proteção ao Crédito (SPC) (last solution) -Stop to credit access	No sanctions existing
Mechanisms of conflict resolution	Renegotiation of the conditions of repayment if the client faces difficulties. He or she goes to the BP and programs a debt rescheduling.	Conflicts negotiated within the FECOL and BP
Self-determination of the community recognized by higher-level authorities	Complex situation: -Lack of an appropriate legal status for the Banco Comunitário de Desenvolvimento (CDB). -The IP is recognized by the government body Secretaria Nacional de Economia Solidária (SENAES) since he was charged responsible to spread the methodology at national level. -The IP is recognized as a trusted institution by public and private institutions: Banco Nacional do Desenvolvimento (BNDES), Caixa Econômica, Banco Popular do Brasil (BPB), Zurich, Camed. -The Central Bank recognizes that his action is not criminal but refuses to regulate the situation	Multiple public authorities attitudes: -hostility of the Central Bank gradually transformed into interest-SENAES support as assisting the development of BP and CDB -in other CDB, municipalities use social currency as an instrument of public policy for economic and social advancement
Organisation in the form of multiple layers of nested enterprises	The various activities are organized by multiple levels of units: -The Associação dos Moradores do Conjunto Palmeiras (ASMOCONP): exercises social control over BP's activities; participates in the collective choices of devices. -BP organizes ownership, monitoring and conflict resolution around the common resource -The Instituto Palmas (IP) organizes the provision of the resource (through partnerships with institutions) => Each entity has its own prerogatives, but the borders are thin	The various activities are organized by multiple levels of units: -The ASMOCONP: exercises social control devices and participates in collective choices -The BP organizes ownership, monitoring and resolution of conflicts over shared resource -The IP covers the operational costs of the currency

Table 1: Eleonora Gentilucci's elaboration from Meyer (2013a, 2013b)

Meyer shows that the principles of management of the commons of Ostrom apply well to microcredit of production. She also supports the view that the administrative structure of Palmas currency corresponds to that developed for the common goods by Ostrom (2013a Meyer, p. 91) albeit with some exceptions. In fact, in the compliance with Palmas social currency to the Ostromian principles of governance, it emerges the lacking of the principles of monitoring and gradual sanctions. As Meyer points out, the Banco Palmas controls the circulation of money and not the behavior of users.

Indeed it appears that the framework proposed by Ostrom can be used to produce new socio-economic, bearing in mind that, in any case, the sustainability of the common resource currency / finance is linked to mechanisms institutional market. This occurs primarily because of a lack of a legislative framework able to guarantee the additional protections to these bottom-up systems. In addition, Banco Palmas and the Palmas Institute depend structurally by the global economic, social and political context: the Institute Palmas is the legal institution recognized that gets the credit and negotiate with other public and private institutional subjects. Moreover, the Palmas Institute has the task of spreading the model of solidarity finance in other communities.

The financial and monetary experience of the Banco Palmas, shows that the Ostromian principles applied in this context, while not allowing a radical change of the capitalist model of reference, allow to introduce in its interior a working mechanism capable of responding to the needs of emancipation from conditions of extreme poverty of the people condemned to social, economic and financial exclusion by economic system of reference.

It is a way to incorporate the principles of participatory democracy within the economic institutions characterized by self-management and self-government.

That experience proves that the economy can operate on the basis of principles beyond selfish hoarding and monopolistic accumulation of resources. As Ostrom says, there are other ways of resource management alternative to the State and the market. Two aspects can be inferred from the application of the Ostromian principles to the experience of social alternative currency and of microcredit of production of Banco Palmas: the role of trust and political choice. A financial resource is renewable only if the loans are repaid and management costs guaranteed by interest rates; in other words the financial resource is renewable when capital back into the coffers of the bank (Meyer 2013a). Only in this way the bank can renew loans to those who ask. Similarly the currency is renewable only if it circulates as purchasing power used by a growing number of people to support their consumption. In this sense, the sustainability of the currency comes by its management system. The use of financial capital (in the form of a loan) exerts its function as an input in the production process, while the core task of social currency is achieved mainly through promoting the consumption (2013a Meyer, p. 16). Are not expected direct transfers of property to other individuals with regard to the financial capital, while the social currency can be transferred to other parties. However, in accordance with Ostrom, the resource units are not subject to appropriation or collective use: the systems of resources are used in a collective way and not the unity of resource itself. The following table (2013a Meyer, p. 16) shows the differences between the natural common good and bank common goods.

System of common resource	Natural capital	Bank capital
		Financial
Resource units	A fish, a tree ...	A loan
Renewal of the resource	The withdrawal of a unit of resource must be deferred in time and must not exceed its capacity for renewal	One who appropriates it has to repay the value of the loan plus interest (thus ensuring the management costs)
Use of the resource	It can be consumed, used as inputs in the production process, donated or sold (transfer of ownership)	The loans are to be used as investment in the production process

Table 2: Differences between natural common goods and bank common goods

4.2 The financial illusion of Gaël Giraud

In the book *Illusion Financière* (2012), Gaël Giraud argues the following thesis: the liquidity and the credit should be organized as commons (Giraud 2012, p. 139). He uses the system proposed by Ostrom, to articulate a complex system of structural reforms of the economy and the society in which the role of money, understood in both its specific characteristics (liquidity and credit) becomes crucial. As emerges well in the report D3.2, Giraud emphasizes that the distinction between public goods, private goods and commons does not depend on the intrinsic characteristics of the asset, but is the result of a political decision of the community.

Giraud emphasizes that the work of Elinor Ostrom and Charlotte Hess, reveals that the commons are not material "assets", but rather they are "systems of rules governing class actions, modes of existing and the activities of the community" (Giraud 2014, p. 142). This is the collective rules of engagement, use and efficient and perennial monitoring. This reflection enrolled in a more general framework in which the ecological transition is the project of a new Europe able to recover from the economic crisis. The money cannot be a common for its intrinsic characteristics, however both liquidity and credit can be managed as a common: "The town comes from the building of a legal framework and democratic institutions that organize reciprocity in order to avoid the kind of free rider behavior or the liability of the users of the branches of the State." (Giraud, 2013, p. 166) ²²

Liquidity is a common, in the sense of Ostrom, who must be politically governed (Giraud, 2013, p. 146). Giraud also argues that banks create money only if it serves their interests²³ For this reason, he argues

²²"...le commun résulte de la construction d'un cadre réglementaire et d'institutions démocratiques qui organisent la réciprocité afin d'éviter des comportements de type passager clandestin ou la passivité des usagers des « guichets » de l'État."

²³In particular Giraud says that the money issued by the banking system is more and more addressed to the subsidization of financial assets that they have nothing real. The reason for this phenomenon lies in the potential returns of the financial sector that are far superior to those of the real sector of the

that to the extent that monetary creation allows economic activity, obtaining credit should be a common, in the sense of Ostrom, distinct and separate both from privatization and from its collectivisation.

Gaël Giraud states that determine which is the inflation rate that an economy can support, does not mean opening the doors to the scourge of hyperinflation. In order to understand what is the border between the two phenomena (inflation and hyperinflation), he argues that we need to distinguish between the domestic money and outside money. Money is internal when it corresponds to a debt: this is the case for example of fiat money that corresponds to recognition of a debt by commercial banks to the Bank Central, or of the credit money. The currency is instead external when it is held without no debt: it is therefore a "pure active" (Giraud 2013, p. 147) that will never return in the budget of the Central Bank. Giraud shows that in our economies, there is a significant proportion of outside money: Once a Statespends more than its earnings, circulates coin that certainly corresponds to a debt, but on which we have to ask if it will never be repaid (This does not mean that the State would bankrupt, but simply that the State may postpone the repayment of debt to the central bank through the mechanism of the Ponzi scheme). "The growth of domestic money supply can create inflation, but never generates hyperinflation" (Giraud, 2013, p. 148) is actually the uncontrolled increase of outside money that may cause hyperinflation. In this context, hyperinflation can lead to two different outcomes: 1. assimilation of money to a public good (excessive government spending that will never be returned); 2. assimilation of money to a private good (private bankruptcy that allows possibly to a private actor to socialize its losses) (Giraud, 2013, p. 149). According to Giraud therefore the best way to create money without risk of hyperinflation is to create only internal currency, creating the penalty conditions that allow that the debts are repaid.

In the logic construction of Giraud, the common, represented by the currency, would allow the financing of ecological transition. An essential point where once again Giraud rejoins the Ostrom point of view, there is when he says, that in determining whether the liquidity and the credit should be considered commons, we must refer to the criterion of efficiency. Ostrom in fact argues that efficiency does not come from private and selfish behavior of individuals, but rather from the collaboration and a different management of the resources that is neither public nor private, but common. Giraud²⁴ then argues that the logic of reciprocity is more efficient than the logic of self-interest of each. "Reciprocity is therefore not only a matter of social equity, but also economic efficiency" (Giraud, 2013, p. 171). In this sense, therefore, according to Giraud, the reciprocity should be a rule policy that the stakeholders of a common may freely choose to share between them. The monetary and financial commons (liquidity and credit) should be managed - according to Giraud- from a budget room in the euro zone, specially created and composed of deputies of finance and social affairs committees of national parliaments and the European Parliament (Giraud, 2013, p. 178).

economy. The critical analysis of the banking system by the securitization, the mechanism through which the bank can transform the credit it holds in a financial asset that can be traded on the market. This is according to Giraud commodification of the credit and trust that accompanies it.

²⁴ To support this thesis Giraud relies on the work of John E. Roemer (2006) which shows that, where the externalities resulting from the action of an individual, the rule of reciprocity can get results more efficient than it would have through market mechanisms governed by the "invisible hand".

Finally, according to Giraud the fact that liquidity and credit are considered common in Europe implies that we should share a currency. However, the fact that there is a common currency does not mean they should not be others. In this regard he proposes a system in which the euro would be the basket of currencies that from 1979 to 1998 constituted the ECU, then the national states may have their own national denominations that could share with each other within the European Central Bank, according to the fixed exchange rates that are determined by a political negotiation (and not through market mechanisms) and could be renegotiated every year in accordance with changes in the trade balance, purchasing power parity etc. International exchanges will be carried out in euros based on the exchange rate of the currency set by the foreign exchange market governed (Giraud 2013, p. 219).

4.3. *La finance e la monnaie comme un commun* by Jean-Michel Servet

In *La finance et la monnaie comme “un commun”*, Jean-Michel Servet (2015), applies the principles of natural resource management to the currency and finance. It is ultimately to find a positive link between human beings in the territories where they live, through a financialization that takes different forms from the present ones.

A financial resource can be established and operated as a common. However, in the monetary and financial, defense of the commons does not materialize through their protection, as happens in the case of natural commons, but it puts in place through the renewal which occurs through a permanent reintegration into the channels of financing. According to Servet, the management of a commons means that you pay close attention to the ways and forms in which it is renewed, not only upstream but also downstream. The failure of some experiences of microcredit can be attributed to the fact that organisations of microfinance seemed to be more interested in micro-credit than to those who borrowed the resource. It becomes important to know what is the cost of the loan over the use made of the loan, or even better, it is important to know what is the distribution in the chain of value that is created. It must indeed ensure that loans made through microcredit does not produce a deterioration of the social and economic conditions of the person taking the loan, which ultimately sees its living conditions deteriorate. The burden of repayments must be sustainable by those who take the loan. Servet stresses that many of default of microcredit, relate to the fact that its marketing has led to privilege the speed of rotation of the invested capital, providing short / very short term credit, without worrying about the adaptation of the services offered to the needs of the population. Considering the source of funding as a common means then put a new focus on the functioning of both the structures and the sector as a whole in a given territory. It is found in this thesis the Ostromian argument of the local dimension that characterizes the institutions of the natural commons documented by Ostrom.

Referring again to the Ostromian principles, Servet then identifies the conditions for the establishment of a common, both financial and non-financial. The three main conditions are: the definition of a group of co-producers or users, setting therefore the constraints and specifying roles, functions or qualities of each part of this space.

The group may be located in a local or global space, in a process of ascending subsidiarity in order to deal with the problems when they arise. The second condition is to establish and make public the conditions of access, ownership, exclusion, distribution, picking and asset plays. The third is to control its use and the ability to obtaining an income.

Once the three conditions are achieved, the operation of the organisations that manage the resource, is supposed to solve any conflicts in the common activity or in the use of funds, as well as to introduce a progressive system of penalties and to define the best way to suppress or exclude those who do not comply with formal rules and informal norms commonly accepted (Servet 2015, p. 6). In this case, therefore, the right of access to financial resources has priority over individual property. The size of share is to be evoked in practice of access to resource of people that are not immediately profitable. The setting of interest rates is considered to be a rule that governs the common and which enables an equalization of wealth or at least not increase inequalities in income and wealth between the different subjects, groups or categories that possess specific characteristics (ibidem). Another key element in the organisation and operation is the process of decision-making that cannot take place in the commons from the top. This is one of the characteristics that distinguishes between a public good and a common good.

Servet (2015, p. 7) gives two examples to show the construction of a commons in the financial and monetary: the first is represented by the guarantee fund dedicated to micro finance organisations such as the International Fund of guarantee of Geneva and the second is given by the wave of complementary local currencies. These latter instruments, which are more political than economic are aimed to overcome the special interests. Decisions are made at each level from collectives that represent all stakeholders: users, suppliers of goods and services and local authorities. According to Servet, this new way of making decisions based on consensus is a decisive innovation, compared to the mechanisms of the social economy in which each member is a voice.

The new generation of local currencies allows acquiring at parity, the complementary currencies in exchange for base money.

The experiences in France, thanks to the support policies of many municipalities, including that of the sol-violets in Toulouse and coin abeille in Villeneuve-sur Lot, fall into this type of complementary/local currencies. The preliminary conversion does not imply, according to Servet, an economic and social exclusion. In fact, he argues that the exclusion is avoided through the presence and work of the charities or local public institutions that allow the poorest to acquire, equally, the monetary complementary resource. This is accomplished, for example, when the municipal cultural or sports services can accept the local currency. In fact Servet claims that you can easily imagine that this revenue will then be intended for the redistribution of purchasing power. This mechanism provides an incentive to the people so that they assist them to pay for municipal or public services. Servet concludes that, first, the procedure triggers a potential mechanism of solidarity (through its redistributive capacity) and secondly we are witnessing a transformation of a resource that becomes common thanks to the intervention of a regional authority (Servet 2015, pp. 7-8). .

Servet points out that the fact that most of the local currency is pegged to a reserve in euro, determines that this deposit represents a sort of common good of the members of the organisation issuing the coin (ibid). Where also the owners of the local currency have to pay a withdrawal on the same currency in order to continue to use it, this group tax is subject to collective use, both through the distribution of coins and to cover operating expenses. There is a kind of appropriation of the value of money made by the group. This can then still assimilating to a pooling.

Servet argues that there are some examples of application of the commons concerning monetary or financial, but these are still few in number. It also acknowledges that does not exist a common that is

such that by its nature. The acknowledgments and the production of the commons depend on the needs in a given situation. Very briefly Servet considers the commons, in the various forms in which they have appeared in front of the needs that were determined, as the forms of opposition to neoliberalism.

The recognition of a common then assumed that prevails access and use of cash flows generated by the resource, its production or reproduction and its management. This can be at different levels and can also assume different forms (Servet 2015, p. 9). Although the new techniques of ICT can be conducive to the emergence of new forms of common, it would be illusory, according to Servet, believe in material determinism like Rifkin. In fact, he argues that the condition for the emergence of new ways of financialization, should incorporate a strong collective will of transformation and democratic participation.

Servet concludes that to meet the needs of financial services appears necessary to put into practice the solidarity, recognizing the finance as a common and hybridization capacity, this is made possible only by the fact that the hidden solidarity of commons, is articulated to the other logic (competition and administration) replacing them. This is according to Servet to draw lessons from a double failure: that of the State, but also the private sector, following the dynamics undertaken by local currencies.

4.4. Jack Birner: currency as cultural resource

Jack Birner (2012a) starts his analysis by the assumption that money is not an homogeneous phenomenon, and that the economists were unprepared for the world financial crisis and for the crisis that involved the euro because they neglected the three basic lessons of economics: firstly the money multiplier that instead of creating money, in the case of the crisis destroyed money; secondly the theory of optimal currency area namely the theory that sustains that a single currency assume a homogeneous real economy; finally the third lesson concerns the fact that there are two instruments of economic policy: the fiscal and monetary policy. When the euro was introduced this lesson was completely neglected, assuming implicitly or explicitly, that the concentration of the monetary policy on the hands of European Central Bank and the Treaty of Maastricht would be sufficient for the convergence of member states fiscal policies.

Birner affirms that “money is a mixed benefit; it is necessary for economic growth but at the same time carries the seeds of instability within itself. However [...] money does not directly satisfy our subjective preferences [...and although essential...], it is a ‘second order group’” (Birner 2012b, p. 8) that give us the capacity to buy other goods. “It keeps nominal value in time and helps us to organize production” (Birner 2012b, p. 8). In this sense Birner asserts that money is a “fictitious goods” in the sense of Polanyi: “what the banking and financial sector produce is – or ought to be – auxiliary to the real economy” (Birner 2012b, p.8).

Birner, proposing an intertemporal reading, like Hayek, argues that a development of the huge financial and monetary system in conjunction with monetary interest rates lower than the real ones, have helped to create the conditions for the current crisis. When the financial sector promises the higher returns than the real sector, it is clear, according to the author, that is promising more than they can keep the real sector, thereby creating the conditions of financial instability.

Birner (2012b, p. 5) identifies the following four functions of the banks in the contemporary society: money creation, inter-temporal brokerage, this is closely related to the task of bundling, together with

the financial system, and putting together the demand and supply of funds. The fourth functions consist on the fact that the banking system acts as an insurance against risks.

Taking up the classical scheme of classification of goods according to their characteristics, the author tries to see what kind of good is the money. First rule out that the coin is a private good (rival and excludable) because, due to the money multiplier, produces externalities that cannot be attributed to anyone in particular, it should in some way refer to a kind of responsibility or collective ownership.

The author then proceeds to analyze whether the money could be considered like a public or collective good (non rivalrous / subtractable and not excludable). "Whoever does not 'buy' a sum of money is excluded from its use" (Birner 2012b, p. 15-16), for this reason the money is an excludable good "at least at the level of the relationship between individuals", but when it comes to money comes into play something more that is not limited to a simple relationship between two individuals. It is a kind of contract or collective responsibility. It is this community that is the guarantor of a second-order good, the currency. The community in question is represented by the banking and financial system that guarantees the value of real goods and services that can be purchased with the amount of currency you have. Anyone who has the currency cannot be excluded from this system of guarantees. Now Birner then goes on to consider whether the currency might be seen as a club good (but not excludable rivalrous / subtractable). In such case the acceptance or possession of the currency would mean being in a club. But now in the market system that characterizes the current socio-economic context no one can afford not to join any club, then there is a compulsion to adherence to what Birner defines "the club of the currency." "Now, if the convergence of the 'money clubs' is so vast and dense, no one can as a matter of fact, exclude himself from membership of his own accord or be excluded" (Birner 2012b, p. 17). A further point that Birner highlights and that prevent us from considering the currency as a club good refers to the fact that the currency that is held in a certain moment cannot be owned by someone else. So money is not only a non excludable good, but also a rivalrous or subtractable good. These reflections push Birner then to argue that the currency cannot be considered as a club good. At this point Birner resumes the works of Elinor Ostrom and wonders if the currency cannot be considered as a common pool resource either common good as it is characterized by being not excludable but rivalrous / subtractable. Before going into an explanation of this concept is worth noting that Birner also argues that the currency cannot be considered as a club good because there are different "monetary clubs" so

"at the global level of the relationship between central banks there is a problem of collective action, which is an additional argument for thinking of money in terms of common pool good in the tradition of Ostrom. So private banks, which together and together with central banks create money, are providers of a particular type of common pool good" (Birner 2012b, p. 18)."

Thus the coin can be considered, according Birner, as a common pool good, at least to make attempts aiming to stabilize the finance and the currency worldwide.

At this point Birner tries to apply the Elinor Ostrom analysis on common pool resources to the money, and in Particular to a specific money: the euro.

First of all in its path Birner proceeds asserting that the monetary sphere is the collective action par excellence. He proceeds to identify the structural variables determinant for successful collective action, as identified by Ostrom. They are:

The number of participants or agents involved. Increasing the number of states that are part of the euro led to an increase in problems of governance.

The group size has positive effects on the probability that a resource would be provided, but on the other hand, the number of participants may also have negative effects because of the free riding, overharvesting and crowding problems. Again the euro is an example of this contradictory phenomenon: in fact at first we were expecting from the euro the benefits of a public good, as if there were no problems related to subtractability. Later however, fiscally undisciplined countries behaved like free riders, making it hardly possible to stronger countries to finance their debts.

The heterogeneity of participants often indicated as a deterrent to cooperation. Each of the euro zone countries had His benefits, so he turned a blind eye even on those problem that could embarrass the euro zone.

Face-to-face communication. Different ways in which agents communicate with one another leave the outcome of social dilemmas unchanged, but experiments contradict these results. For Ostrom it is a mystery why this is so. In the euro crisis communication between the various stakeholders involved (government leaders, central bank governors, director of the IMF) are essential to try to find a solution to the crisis.

Information on past actions may make much difference for the choice of strategy in repeated interactions. This is true even in the case of the euro, but Birner points out that in fact, virtuous behavior may not be sufficient to be able to participate in important decisions.

How agents are related in a network. According to Ostrom, in one-directional network individuals have a higher probability to contribute to the well-being of others than when the individual resources are put into a common pool from which all of them may benefit. The position within the network is therefore essential, as are the links and relations of power.

The possibility that agents may enter and leave more or less voluntarily. The Treaties do not provide that a State can leave the euro, but there seem no impediments to such an occurrence according to Birner.

Birner then assimilates the currency to a cultural resource as it was born from the ideas and thoughts of the people. These ideas about the functions that must have the currency shall be appropriate to preserve the very existence of the currency. In fact, the author claims that money exerts its monetary function, not by virtue of its intrinsic characteristics and objective, but for the fact that people are convinced. It is actually a mechanism based on trust. So Birner differentiates natural resources from social ones: the former can live and reproduce without human intervention, which, however, can help destroy. The second, instead, “whether they have been deliberately created or emerged spontaneously, not only can be destroyed by us but also depend on us for their very existence” (Birner 2012b, p. 24). In fact, “Natural resources, if not overused to complete exhaustion, may replenish themselves without human intervention, a process that may be stimulated by an adequate governance system.” (Birner 2012b, p.4). To Birner, , “money, on the contrary, owes its emergence and existence to the ideas and expectations we human beings have and share: money is a cultural artifact” (Birner 2012b, p.24). He argues that “in the case of social or cultural resources such as money, however, the governance system is part of the resource itself” (Birner 2012b, p. 4). Natural resources and “man-made” (Birner 2012a, p. 107) resources, “both need investments in order to maintain them” (Birner 2012b, p. 25). At this point

stands the problem of the distinction between stock and flow of resources and their relationship. In this sense Birner performs a parallel assimilating the idea of Hayek and the thought of Ostrom. In a nutshell, one could say that the central idea of Hayek claims that “in order for the stock to be maintained and to continue yielding its services, [...] continuous investments are needed” (2012b, p. 4). According to the interpretation proposed by Birner, both are trying to find a system of governance that will allow those who are entitled to a resource, to use in the production of goods and services while preserving its sustainability, be it a natural resource, be it the investments did because the stock to capital produce a continuous flow of goods and services (2012a, p.107). “Applied to money, this means that in order to keep up a flow of ‘good money’, it is necessary to invest in the stock of social capital that produces it” (2012b, p. 25).

Ostrom distinguishes in his analysis between stock or pool resource, and a flow of goods and services. Such scheme can be applied in a similar manner to the currency, bearing in mind that there would be one more complication deriving from the fact that, as we have seen, in the currency governance is part of the resource itself. The value of money is based on trust²⁵ which, then, represents the stock that produces the money and financial services of the currency and that translates into an institutional framework made of relationships between all stakeholders.²⁶

4.5. Conclusive remarks

Ostromian approaches to the currencies that have been taken into account reveal some of the interpretations identified by Ostrom in her works on natural and cultural commons. Among them emerge the reclassification of the assets based on the intrinsic characteristics, the identification of the eight principles of governance of the commons, the definition of the commons as a resource shared by a group of people and often vulnerable to social dilemmas.

From the analysis presented emerges as the application of the Ostromian approach to the analysis of currency already provides many insights. In general, Ostrom’s analysis is used to analyze the concrete systems of alternative currencies, as in the case of the Banco Palmas, or to theorize alternative socio-economic systems that are based on the conception of money as an Ostromian common, that is the case of the contribution of Gaël Giraud.

Sustainability, or rather the form of the renewal of the common monetary, represents probably the main element that unites all of the studies we review here. According to Servet, the renewal of the currency as common, it is realized in the form of a permanent resettlement in the monetary circuit. On the basis of the work of Ostrom, talking of sustainability refers to a system of management rules.

However Meyer believes that monetary / financial sustainability related to the market institutional mechanisms.

More generally, human action is the necessary element to ensure monetary / financial sustainability. Like in the cultural commons analyzed by Hess and Ostrom, emerges the character constructed of the monetary common is the result, as well pointed out by Giraud, of a conscious political choice.

²⁵According to Birner this element supports once again the hypothesis that the currency should be considered as a common good.

²⁶For a deepening of stakeholders see Birner (2012a and b).

To ensure sustainability as well as for the construction of the common, one of the indispensable elements is represented by trust. For Birner it is from it that comes the renewability of the resource. In the reasoning of Birner, trust represents a stock that allows for the production of monetary and financial services that translates into an institutional framework made of relationships between all stakeholders. For Meyer, in the experience of the Banco Palmas, trust is the basis for obtaining and repayment of loans. It is the pivot element that allows the success and sustainability of the experience presented. In the perspective of Giraud trust is the tool that allows you to subtract the monetary common to the process of commodification that characterizes it. In this sense it complements the concept of reciprocity, which makes the establishment of the new monetary common more efficient than the one in which self-interest prevailed. Like Ostrom, Giraud not frees from the recognition of the importance of efficiency, but it is the proof that there is a monetary system, guided by reciprocity, more efficient than selfish system, that allows emancipation from dualism State / market.

To ensure sustainability, Ostrom attributes a decisive role to the principle of subsidiarity. In line with this view, Giraud and Servet identify subsidiarity in the element that can cope with problems when they arise in the monetary common

The implementation of sustainability thus becomes critical to ensure the character of the common currency. According to Servet it must be done with particular attention to the both upstream and downstream forms of renewal of the common. Some unsuccessful experiences of microcredit can be attributed to their lack of attention to the debtors.

It seems in our view that the conditions of existence and continuity of the Banco Palmas, that is to use the Ostromian words, its sustainability, are endorsed by a seriousness that does not mean exacerbated restriction or impossible conditions, but simply adaptation to local socio-economic conditions. This last element is therefore one of the key determinants of the building currency as a common, or rather as a common pool of resources.

In fact, a second key element is represented by local dimension that characterizes the institutions of the natural commons studied by Ostrom. It is the local dimension that allows for the implementation of some of the experiences of monetary or financial common, such as those of local / complementary currencies. The theory of Giraud is different from others in that he uses the monetary common system to arrive at a new building of the socio-economic and monetary system. However this does not mean that there is not a local dimension essential to the realization of the system proposed by Giraud.

A third element that unites the analysis of the monetary / financial common proposed by the authors, is made up of the accessibility: in order to consider currency as a common, there must be the possibility of access to the resource. As pointed out by Giraud, it is in the political choice of considering the good, currency, not be excludable, that guarantees access to the resource. However, there is an additional condition: the democratization process that is expressed in the attempt to create institutions of governance, bottom-up. Decisions are taken by collectives that represent the different stakeholders. This mechanism, as pointed out by Servet differs from those of the social and solidarity in which each member expresses their own opinion. However, there is an additional condition: the democratization process that is expressed in the attempt to create bottom-up institutions of governance. Decisions are taken by collectives that represent the different stakeholders. This mechanism, as pointed out by Servet, differs from those of the social and solidarity economy in which each member expresses his own opinion.

The combination of the two dimensions ("being local" and "accessibility") in the application of the Ostromian principles to complementary currencies, also allows us to highlight the redistributive character of the local currencies as well as the ability that they have to ensure the access to credit to people who are excluded from the traditional circuits.

A fourth element that Ostromian approaches to the currency aim to eradicate is the link between deregulated financialization and currency. In fact, the inclusion of currency in the framework of rules and principles of construction of a common allows reconstructing, through a bottom-up process, the essential link that binds the currency to the real sector of the economy.

5. PART2: Implementing the Freecoin: Normative Frameworks for D-Cent Pilots

5.1. The state of the art in Catalonia²⁷

In this section, we will analyse the Catalonia law about digital payment system, since the last decree of 2009 (Law 16/2009 of November 13) and 2011 (Law 21/2011 of July 26), but recalling also other past measures.

Law 16/2009 of November 13, in particular, is about payment service which requires it to be constituted as payment service entity.

«Issuing and acquiring of payment instruments" [article 1.2.e) LSP], defined as "any mechanism or personalized device or set of agreed procedures between the payment service provider and payment service user, used for it to initiate a payment order»²⁸

[article 2.23 LSP].

E-money is electronic money and it is defined by article 1.2 Ley 21/2011, of July 26. This law is to lay the foundation for full legal recognition of electronic money itself and the rules for issuers thereof, which do not even need to be credit institutions, being relaxed their hard requirements:

The appearance on the Community market for the first prepaid electronic instruments led to the adoption of Directive 2000/46 / EC of 18 September 2000, on access to the activity of electronic money institutions, pursuit and prudential supervision of these entities, also in Spain, and in Catalonia, in particular.

Directive 2000/46 / EC was incorporated into Spanish law by Article 21 of Law 44/2002 of 22 November, on measures to reform the financial system and the Royal Decree 322/2008 of 29 February on the legal regime of electronic money institutions, it develops. Both responded to the main purpose of encouraging competition and opening up the sector to the issuance of electronic money institutions other than the bank, enabling the creation of a new type of entity, the business of electronic money. Ten years after the adoption of this first Community regulation has proven both the opportunity model, the need to address some reforms that could improve its practical effectiveness and contribute further to the development of this market.

The review of these issues are finally substantiated by Directive 2009/110 / EC of 16 September 2009, on access to the activity of electronic money institutions and exercise, as well as the prudential

²⁷Lucia Bonacci

²⁸The original Spanish text is the following one :« *la emisión y adquisición de instrumentos de pago*» [article 1.2.e) LSP], entendiendo por tales «*cualquier mecanismo o mecanismos personalizados, o conjunto de procedimientos acordados por el proveedor de servicios de pago y el usuario del servicio de pago, utilizado por ésta para iniciar una orden de pago*»

supervision of these entities, by Directives 2005/60 / EC and 2006/48 / EC and amending Directive 2000/46 / EC repealing whose transposition is under this Act.

In line with this Directive, there are three main objectives that can be identified in this Law: 1) increasing the accuracy of the legal regime for the issuance of electronic money and then increasing legal certainty for the market, too; 2) proportionate legal regime, so that certain requirements of the business of electronic money, as too onerous for entities, have proved inadequate in relation to the risks eliminating your activity; 3) ensuring consistency between the new legal regime for payment institutions and apply to electronic money institutions.

The law is structured in six chapters. The first one contains general provisions governing the main aspects of the standard, specifying the regulation of electronic money, from a legal point of view, professional, and related instruments.

The second governs the use of electronic money in banks and also indicates authorities considered as potential issuers.

Chapter III is devoted to the regulation of cross-border activity of electronic money institutions, foreseeing a system for reporting to the Bank of Spain in the case of intra-Community activity and authorization when it covers third countries.

In Chapter IV the possibility that electronic money institutions delegate to third parties the performance of certain activities such as the provision of operational functions or the distribution and redemption of electronic money is contemplated. It is established, however, the prohibition of issuing electronic money through agents.

Chapter V addresses, generally for all issuers of electronic money, the rate of issue and redemption of this product. It guarantees repayment free, if the issuer of electronic money falls in value. However they are also established where the issuer might level against an expense.

Chapter VI details, finally, the powers that correspond to the Bank of Spain for the proper exercise of the supervision of electronic money institutions, the regime of significant shareholdings in these entities and the sanctions applicable to them, in the key, follow the provisions of Law 26/1988 of July 29, on discipline and intervention of credit institutions.

Art. 1.2 of Law 21/2011 of July 26 reads:

«1. Electronic money is for the following categories of electronic money issuers:

) Credit institutions, referred to Article 1.2 of Royal Decree 1298/1986, of June 28, on the adaptation of current law on credit institutions of the European Communities, and any branch in Spain of a credit institution whose parent is domiciled or authorized outside the European Union.

b) Electronic money institutions authorized under Article 4 of this Act and any branch in Spain of an electronic money institution whose parent is domiciled or authorized outside the European Union.

c) The Posts and Telegraphs State Society, SA, concerning the activities of issuing electronic money that is authorized under the relevant legislation.

d) The Bank of Spain, in which not acting in their capacity as monetary authority .

e) The central government, the autonomous communities and local authorities, acting in their capacity as public authorities.

2. Issuing electronic money as defined in Article 1.2 of this Law is prohibited to any natural or legal person other than the ones listed in the previous paragraph.

3. Natural or legal persons who violate the provisions of this Article, shall be punished as provided in Article 29 of Law 26/1988, of 29 July, on discipline and intervention of credit institutions, subject to other responsibilities that may be payable.»²⁹

These regulatory conditions are found in Article 23 of Royal Decree 778/2012, of 4 May, on the legal regime of electronic money institutions, which, after noting that it is considered that the use of an instrument is confined to a network limited if it can only be used for the acquisition of goods and services in a particular chain of suppliers of goods or services, or for a limited range of goods and services, whatever the location of the point of sale, clarifies that «if a tool for specific purposes becomes a tool with a more general purpose, it will be included in the scope of this Royal Decree. In addition, the instruments that can be used for purchases in stores of listed merchants are not excluded from the scope of this royal decree since they are typically designed for a network of service providers which is continuously growing.»³⁰

However, the legislator, both Spanish or European, has not expressly ruled on the legal nature of the barter-units.

²⁹ The original Spanish text is the following one: «1. Podrán emitir dinero electrónico las siguientes categorías de emisores de dinero electrónico:

a) Las entidades de crédito, a que se refiere el artículo 1.2 del Real Decreto Legislativo 1298/1986, de 28 de junio, sobre adaptación del Derecho vigente en materia de entidades de crédito al de las Comunidades Europeas, y cualquier sucursal en España de una entidad de crédito cuya matriz esté domiciliada o autorizada fuera de la Unión Europea.

b) Las entidades de dinero electrónico autorizadas conforme al artículo 4 de esta Ley y cualquier sucursal en España de una entidad de dinero electrónico cuya matriz esté domiciliada o autorizada fuera de la Unión Europea.

c) La Sociedad Estatal de Correos y Telégrafos, S.A., respecto de las actividades de emisión de dinero electrónico a que se encuentre facultada en virtud de su normativa específica.

d) El Banco de España, cuando no actúe en su condición de autoridad monetaria.

e) La Administración General del Estado, las Comunidades Autónomas y las Entidades Locales, cuando actúen en su condición de autoridades públicas.

2. Se prohíbe a toda persona física o jurídica distinta de las recogidas en el apartado anterior emitir, con carácter profesional, dinero electrónico tal y como se define en el artículo 1.2 de la presente Ley.

3. Las personas físicas o jurídicas que infrinjan lo dispuesto en este artículo, serán sancionadas conforme a lo dispuesto en el artículo 29 de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito, sin perjuicio de las demás responsabilidades que puedan resultar exigibles»

³⁰The original Spanish text is the following one: «en caso de que un instrumento con fines específicos se convierta en un instrumento con fines más generales, habrá de entenderse incluido dentro del ámbito de aplicación de este real decreto. Asimismo, los instrumentos que puedan utilizarse para comprar en establecimientos de comerciantes afiliados no se encuentran excluidos del ámbito de aplicación de este real decreto puesto que están pensados habitualmente para una red de proveedores de servicios que crece constantemente»

This report focuses on the legal form of the entity managing the payment system mutual claims (which we call "Circuit of Social Commerce" or its abbreviated form 'CCS') and, more specifically, the problem is whether that private entity must be established as a financial institution and, more specifically, whether to take any of the following legal forms: one payment institution; and two electronic money institution.

From as we can learn from the report, the "Circuit of Social Commerce" (CCS) entity whose main function is the administration and management of the operation of mutual claims payment, does not fall within the scope of the rules of payment and, therefore, should not be constituted as a payment institution.

Review confirms the fact that the ECB has decided, in a report issued in October 2012, in the sense that virtual currencies are orphaned control and therefore fall outside the scope of the rules of payment services (in this case, Directive 2007/64 /CE of the European Parliament and the Council of November 13, 2007, on payment services in the internal market, which forms the basis of the Spanish rules). It can also be mentioned that in the same vein, the European Banking Authority has also recognized the lack of regulation of these coins, saying that "virtual coins are a form of digital money unregulated not issued or guaranteed by a bank Central and that can serve as a means of payment".

Accepting that CCS (Circuit de Comerç Social) should not be constituted as a payment institution, nor, according to the warnings made as electronic money institution, we affirm the principle of freedom of legal form. More precisely, CCS may choose any of the legal forms generally permitted in the legal system for the development of an economic activity.

Spanish system has the three basic characteristics: heterogeneity between different legal branches; existence of an initial approach setting out the design and the basic rules of the system; brevity of the responses.

In other words, Social Trade Circuit (STC) system is basically an online banking and payment system that administrates claims between members and facilitate to transfer these claims as a way to clear debts in between the registered members.

In legal terms the idea is to organize the network as a Barter or mutual credit network. The difference with normal Barter is that:

“First, the network will gather funds to counter defaults, so that the burdens of the mutual credit can be forwarded to where they best can be dealt with,

- Second, balances can be offered for sale for euros between members, and

- Third, under certain circumstances, the network will sell or buy as well using units from the guarantee fund or money obtained from the insurance in cases of defaults” (Castañer and Rubio 2015a, p. 111).

CGT = Credit Guarantee Fund.

This is a part of STC: a network in which members trade goods and services using an internal means of exchange (units).

It is used for two main purposes:

I. To cover defaults of credits in units provided to members of the Circuit;

2. To manage (sell/buy) the units and euros that are owned by the fund in a way that results in an exchange rate of matured units as close as possible 1:1 to the euro.

Underlying this, there is article 1445 of Civil Code:

“por el contrato de compra y venta uno de los contratantes se obliga a entregar una cosa determinada y el otro a pagar por ella un precio cierto, en dinero o signo que lo represente”.

Companies can buy units from other companies that pay in Euros as there is no rule that prevents a person or entity to purchase units from another person or entity in exchange for euros (in fact, this is guaranteed by said article).

D 2.1.2 – Report on legal compliance Catalonia explains well the relationship between the circuit of social commerce of Catalonia (STC), and the Guarantee Fund of Credit (CGT) that acting, like any member, buying and selling units. Here, we can read:

“The STC provides members, that pass the evaluation of the insurance partner, the opportunity to create a specific dated future payment promise, the opportunity to use that as liquid claims inside the network.

The STC/ or/Credit Guarantee Fund earns units by (part of) specific fees. If there is a default of a credit provided to a member of the Circuit in units, the Fund over time destroys a quantity of units equal of the value of the credit.

A debtor has to repay its credit with 13 units that have the same age as the credit has. When the debtor has not earned enough of these units to repay the credit, he can either pay in euros or try to find this kind of units in the market” (Castañer and Rubio 2015a, p.113).

Risk of default is very high, as providers could not cover more than the required guarantees, since the unit paid to the Fund accrues when the credit has to be repaid, with the need to balance matured units when the debtor is looking to buy these matured units for the Fund.

“Might guarantees not cover all losses due to defaults, then the Fund does not have any units left to offer to balance the exchange rate at par and euros will get a higher value than units. Effectively this means that all members selling units for euros contribute a little to cover the loss of the defaults. Technically the guarantee fund sells at an early point some units to push the value down, so that it can buy when the value would drop unrealistic low (realistic is that the value drops with the difference of defaults minus guarantee fund related to the total some of credits)” (Castañer and Rubio 2015a, pp. 113-114).

Interesting is the question, who are in D.2.1.2, on the relationship between the rules of the STC and the Spanish electronic commerce. The first law to be mentioned is Ley 34/2002, of the July 11, Servicios de la Sociedad de la Información y de Comercio electrónico (LSSI).³¹

This bill's project includes the regulation of the legal status of services of the information society and contracting via electronica, with regard to the obligations of service providers including those who act as intermediaries the transmission of content by telecommunications networks, business communications

³¹ For the full text of the law, see <http://www.boe.es/buscar/act.php?id=BOE-A-2002-13758> .

electronically, prior and after the conclusion of electronic contracts, the conditions for its validity and efficacy and sanctions applicable to providers of society information.

The preamble to the law reads: “se acoge, en la Ley, un concepto amplio de servicios de la sociedad de la información”, that covers both the supply of goods and services electronically, and those who generally might be called multimedia information, as long as these represent an economic activity for the provider.

In general, focusing on Article 2, this law is applicable:

- The providers of the information society established in Spain and the services they provide
- Services of the information society that residents or domiciled in another State through providers offer permanent residence located in Spain³²

It is considered that a provider operates through a permanent establishment situated in Spain when provided therein, continuously or habitually, installations or workplaces, which perform all or part of their activity.

Leaving out cases that are excluded by law, it may, in conclusion, to say that the application to STC of the LSSI undoubtedly because, first, it will provide at least contracting services electronically (Article 1.1 LSSI) and, second, made through an entity established in Spain since they have their domicile in Spanish territory and this will coincide with the place which is effectively centralized administrative management and direction of business (Article 2.1 LSSI).

The law includes 45 articles, even if those immediately applicable to the STC are the following: articles 6; 10; 13; 19-22; 23-29 and 35 (Castañer and Rubio 2015a, pp. 151-152).

It is important to write down the first three articles above cited:

Art 6: The disposition of the information society will not be subject to previous authorization. This rule doesn't apply to the licensing arrangements provided by law that are not specifically and exclusively the delivery of telematics services

Art. 10, whose general lines recite: In derogation the requirements on information provided by law, the provider of information society is obliged to have the means to both recipients of the service and competent agencies, access electronically, permanently, easy, direct and free access to the following information

Art 13: Responsibilities of providers of information society services.

1. Suppliers of information society services are subject to civil, criminal and administrative liability, provided in the legal system in general, subject to the provisions of this Act.

2. To determine the responsibilities of service providers for the performance of brokerage business, it will be as provided in the following articles.³³

³²The original Spanish text is the following one: “Los prestadores de servicios de la sociedad de la información establecidos en España y los servicios prestados por ellos. Los servicios de la sociedad de la información que los prestadores residentes o domiciliados en otro Estado ofrezcan a través de un establecimiento permanente situado en España”.

Moreover, this law does not preclude the application of other rules, if any, applicable to the service provider or the service itself by its nature or characteristics.

And Article 24 adds that “providers of information society established in Spain are subject to the other provisions of Spanish law, according to the development activities, regardless of use of electronic means for its realization”³⁴ (Castañer and Rubio 2015b, p. 152).

Clarifications to this law have been made with the legislation of the July 8, 2013.

The issue raised was as follows: taxation in the form of income tax arises in the value added tax and stamp duty, various buying and selling virtual currency and virtual credit cards, both single-use and rechargeable.

The following provisions have been taken in accordance with Article 36.2 of the Commercial Code that defines the income: “increase in shareholders during the year, both in the form of inflows or increases in assets or decrease in liabilities, if not from contributions of members or owners”³⁵ and in accordance with paragraph 4 of the Marco Conceptual de la Contabilidad, in Part I of the Plan General de Contabilidad (PGC), approved by Royal Decree 1514/2007 of 16 November and, in the meantime, according to the Standard Registry and Valuation 14a of the PGC.³⁶

³³ The point 1.f) has been changed, in the final disposition, by the law 9/2014 of May 9; the point 1.b) and f) has been changed by the law 56/2007 of December 28; paragraph 3 was added in accordance with regulation 8.1 of the law 59/2003 of December 19. The original Spanish text is the following one:

Art. 6: *No sujeción a autorización previa.*

La prestación de servicios de la sociedad de la información no estará sujeta a autorización previa. Esta norma no afectará a los regímenes de autorización previstos en el ordenamiento jurídico que no tengan por objeto específico y exclusivo la prestación por vía electrónica de los correspondientes servicios.

Art. 10, whose general lines recite:

“Sin perjuicio de los requisitos que en materia de información se establecen en la normativa vigente, el prestador de servicios de la sociedad de la información estará obligado a disponer de los medios que permitan, tanto a los destinatarios del servicio como a los órganos competentes, acceder por medios electrónicos, de forma permanente, fácil, directa y gratuita, a la siguiente información”.

Art. 13 *Responsabilidad de los prestadores de los servicios de la sociedad de la información.*

1. Los prestadores de servicios de la sociedad de la información están sujetos a la responsabilidad civil, penal y administrativa establecida con carácter general en el ordenamiento jurídico, sin perjuicio de lo dispuesto en esta Ley.

2. Para determinar la responsabilidad de los prestadores de servicios por el ejercicio de actividades de intermediación, se estará a lo establecido en los artículos siguientes.

³⁴ The original Spanish text is the following one: “los prestadores de servicios de la sociedad de la información establecidos en España estarán sujetos a las demás disposiciones del ordenamiento jurídico español que les sean de aplicación, en función de la actividad que desarrollen, con independencia de la utilización de medios electrónicos para su realización”

³⁵The original Spanish text is the following one: “incrementos en el patrimonio neto durante el ejercicio, ya sea en forma de entradas o aumentos en el valor de los activos, o de disminución de los pasivos, siempre que no tengan su origen en aportaciones de los socios o propietarios”

³⁶ For the full text of the law, see <http://petete.minhap.es/Scripts/know3.exe/tributos/CONSUVIN/texto.htm?NDoc=27263&Consulta=&Pos=433&AP=0&AC=1&IP=50&IC=7>

Below, we propose two Catalan cases, exemplifying the use of new structures and new methods of payment, to face the current crisis situation: the Catalan Integrate Cooperative and the Ecosol:

Catalan Integrated Cooperative (CIC).

Under the label "integrated," the Cooperative functions as a political project seeking to tie together consumer and labor initiatives "and many others, such as education, mechanisms to create a cooperative basic income, eco-stores, collective stores, meetings and events, and a legal structure to help the formation of eco-networks and other similar projects in Catalonia," explains its communication team.

The CIC's objective is to generate a self-managed, post-capitalist society based on P2P principles and environmental and social realities.

The legal frame on Integral cooperatives is protecting the self-management from the effect of the bank and the State.

The Catalan Integrated Cooperative is a step beyond consumer cooperatives, because it also seeks out the contribution of services, creating a network of trust that allows the people associated with the Cooperative to cover many of their basic needs, with a will to transform" explains Gema Palamós from the legal team. Legally, the CIC is a 'mixed cooperative' according to Spanish and Catalan law, meaning that it doesn't limit itself to any single activity.

The term "integrated" alludes to the Cooperative's political project, although it's not a second-level cooperative—a cooperative whose partners are also cooperative members. Rather, it's a "first-level cooperative whose partners are physical people" clarifies Palamós. The project brings together various eco-networks that function throughout Catalonia, connecting them and providing a legal structure for the physical people associated with them. This legal structure benefits the CIC in financial and legal terms, as well as in labor matters. "If we all were conscious of the advantages of the cooperative model when it's goal isn't profit, but rather living from your work, there would be a lot more cooperative projects," points out Palamós". (Manrique 2012)

The CIC is a new model that could revolutionise the economy in Spain, providing solutions to a multitude of problems: nearly 50% youth unemployment, intense taxation for the self-employed, austerity measures, and a corrupt banking system. It is creating legal structures that work for people. The CIC does have a physical space in Barcelona, in an office called Aurea Social, but it is fundamentally a decentralised structure, with horizontal decision making, and members/activities/projects spread throughout the region.

"CIC's objective is to create a self-managed free society outside law, state control, and the market's rules. Having their own currency plays a crucial role in this, and FairCoop adopted the FairCoin to avoid using the banking system. The co-op regards transformation to a fairer monetary system as a key element in building a new global economic system" (Voinea 2015).

Affiliated to the CIC is FairCoop, an independent co-operative equivalent of Bitcoin, distributed for the first time in March 2014.

The Ecosol

In Catalonia another alternative digital currency, Ecosol, is also helping to grow the social and solidarity economy.

Ecosol can be used to trade within the Ecosol Market (EM), which enables social economy actors to buy and sell goods and services online and in shops using the digital currency. The project is an initiative of Xaraxa d'Economia Solidària (XES) de Catalunya, a network of co-operatives and social economy enterprises from the region.

Ecosol is a legal currency, with regulations.

1 Ecosol being the equivalent of €1. Transactions are done through an online account that each user has or through an app. When payments are made in store, consumers can also use the web or the app.

Ecosol operates primarily online, with the exception of the Social and Solidarity Economy Fair held annually where customers can use printed tickets. The Ecosol is only valid within the network of members of the EM.

Unlike the FairCoin, Ecosol is not intended to replace the euro, but to act as a social currency, as a network of purchasing goods and services and trade. It is based on an agreement between people and private entities that establish and accept their own standards.

Consumers can obtain credits to buy goods and services. If the debtor does not have enough Ecosols to return the loan on the due date they can pay in euros. They can also make a deposit in euros and get Ecosols in exchange.

Like CIC and Ecosol, Eurocat in D-CENT will be structured in accordance with relevant regulations relating to the operations of a commercial credit circuit with the Catalonian jurisdiction, both public and private. In order to appreciate the operational and legal framework details of the Eurocat system, the reader is strongly advised to read the detailed documentation on Eurocat relationships with both the Euro and Catalan law offered by Eurocat lead users in Appendix 1.5 of this deliverable: Functional Analysis of Eurocat – Micro-endorsement and Mutual Credit System.

4.2 The state of the art in Italy³⁷

In Italy, there are several promising examples of complementary currencies. Particularly Sardex.net has been contacted by innumerable organisations, among them there are prospective partners that had an understanding of the model and the skills to bootstrap a bottom-up network through a national deepening economic crisis: seven network start-up have launched outside of Sardinia, each employing 5 to 10 people on average³⁸. Recently even Regione Lombardia (the public administration of the richest Italian region) has announced the intention to build a regional monetary circuit tailored on Sardex experience. Considering that Lombardia produces more than 20% of the Italian GDP, this experiment will be the first case in which a Local Currency Circuit could reach an high scale volume of transactions.

These examples have contributed to develop a certain interest in a substantial part of the Italian policy makers. A bill has been presented to the Chamber of Deputies in July 2014, in order to regulate

³⁷Stefano Lucarelli, Lucia Bonacci and Lucio Gobbi.

³⁸Tibex.net in Lazio, piemex.net in Piemonte Region, CircuitoAbrex.net in Abruzzo Region, CircuitoMarchex.net in Marche Region, CircuitoSamex.net in Sannio (a part of the Campania Region) and Molise Region, CircuitoLiberex.net in Emilia Romagna Region, Sicanex.net in Sicilia Region, and finally CircuitoLinx.net in Lombardia Region. See <http://www.sardex.net/gruppo/>, where is possible to monitor all the network start-ups.

complementary currencies, including territorial compensation systems, giving the criteria for their participatory construction.

The bill describes and analyzes the fields of use of backed currencies (“monete complementari con copertura in moneta avente corso legale”) and mutual credit currencies (“monete scritturali di credito cooperativo”) (Amato 2015, pp. 40-44).

The main points of the law are the following:

Art. 1, comma 5, lettera d), 1:

"Complementary currencies hedged lawful currency (backed currencies), issued in exchange for the payment of the equivalent in euro resulting from the application of the fixed ratio of equivalence determined by lettera b), numero 1), for which issuers provide full convertibility in euro".

Art. 1, comma 5, lettera d), 2:

"Mutual credit currencies, constituting the unit of account used in a clearing house to record the positions of give and take arising from exchanges of goods or services between participants in the circuit of complementary money".

It also determines the role of by the Bank of Italy:

Art. 1, comma 5, lettera e), 1, 2, 3 e 4:

"e) establishing that issuers and operators of complementary currency's circuits are recorded in a register and subject to authorization and supervision by the Bank of Italy, which:

1) determines the requirements of economic stability and soundness of the management entities referred to lettera a); 2) determines the requirements of professionalism, integrity and independence of corporate officers of the entities referred to lettera a), as appropriate to the characteristics of the circuit, as well as representatives of the guarantee institutions referred to lettera f); 3) verify that the requirements referred to in number 2) and the law by the operators; 4) monitors compliance with the interests of participants in the circuits and the principle of prudence."³⁹

³⁹The original Italian text is the following one:

Art. 1, comma 5, lettera d), 1:

“monete complementari con copertura in moneta avente corso legale (backed currencies), emesse in cambio del versamento di un equivalente controvalore in euro risultante dall'applicazione del rapporto fisso di equivalenza determinato ai sensi della lettera b), numero 1), per le quali i soggetti emittenti garantiscono la piena convertibilità in euro”;

Art. 1, comma 5, lettera d), 2:

“monete scritturali di credito cooperativo (mutual credit currencies), costituenti l'unità di conto utilizzata all'interno di una camera di compensazione per registrare le posizioni di dare e avere derivanti da scambi di beni o di servizi fra i partecipanti al circuito di moneta complementare”.

Art. 1, comma 5, lettera e), 1, 2, 3 e 4:

“e) stabilire che gli emittenti e i gestori di circuiti di moneta complementare sono iscritti in un apposito elenco e soggetti ad autorizzazione e sorveglianza da parte della Banca d'Italia, la quale:

The bill proposal represents the will of the Italian legislator to create a wide institutional framework in order to regulate different kinds of complementary currencies. Such a will can be detected not only in the legal division between asset backed and mutual currencies, but also in the different ways in which each kind of money can be developed and implemented. For that reason it is important to mark that the proposal introduces the possibility to pay wages in complementary currency. This tool is able to enhance credit circuit cohesion and moreover it can be a valid anti crisis device. In the bill it can be explicitly found in the Art 1 comma 2. a

“Defining complementary currencies as exclusive electronic payment tools which aim to facilitate good and service exchanges, including wages, within a socioeconomic community defined by both territorial and functional criteria”

Another important principle that the bill proposal aims to regulate is that of the demurage. This principle gives the possibility to charge unused complementary currency credits by a negative interest rate. In the bill proposal:

“The possibility for the issuing entity to charge complementary currency holders by a negative interest rate for unused reserves”. Pilot implementation for the use-case at Macao will take into account the contents of the bill proposal when and where they will reveal as relevant in order to structure a law abiding prototyping phase in WP5.

4.3 The state of the art in Finland⁴⁰

According to D-CENT partners at Forum Virium Helsinki, the Finnish situation is one that presents no legislation with regards to alternative currencies. The latter are not illegal. They are simply not regarded as "currency" at all from the legal point of view.

The discussion - as refers to e.g. timebanks and similar - has been around the tax authority wanting to make sure that it is not used for tax evasion. as long a people getting income in alternative currencies report their income to the tax authority, there is no problem.

No foreseen risks for the Finnish pilot as it is a very localized experiment within an extremely small community (200 households / 500 participants). Further, as the digital tokens that will track social currency at Helsinki Urban Cooperative Farm cannot be exchanged for Euros, risks of undesirable influences on conventional monetary policy are practically absent. The only risk can be lack of adoption of Multapaakku and stagnation of the system.

Within the experimentation on the Digital Social Currency for D-CENT, since in Finland one speaks of social remuneration, the Freecoin implementation should be supported by an ad hoc legal framework, i.e. one that takes into account the common character of the payment system proposed in the

1) determina i requisiti di equilibrio economico e di solidità gestionale dei soggetti di cui alla lettera a); 2) determina i requisiti di professionalità, di onorabilità e di indipendenza degli esponenti aziendali dei soggetti di cui alla lettera a), in misura adeguata alle caratteristiche del circuito, nonché dei rappresentanti negli organismi di garanzia di cui alla lettera f); 3) verifica il rispetto dei requisiti di cui al numero 2) e delle norme di legge da parte dei gestori; 4) vigila sul rispetto degli interessi dei partecipanti ai circuiti e del principio di prudenza”

⁴⁰Marco Sachy

chartering process. For instance, ownership of the system should be distributed to managers and participants of such system. By the fact that members of Helsinki Urban Cooperative Farm are also members of Forum Virium Helsinki, all necessary interaction with public bodies (tax / VAT fiscal agencies) will be secured. Moreover, since there is no regulatory framework at the national level and since Freecoin will circulate only within the community of members of the cooperative, this pilot can be seen more as a game in trust management dynamics played in a real world informal setting, rather than as a genuine alternative and complementary currency scheme such as the Spanish or, in part, the Icelandic ones.

4.4 The state of the art in Iceland

Apart from phenomena such as examples of alternative currencies in Iceland in the past few decades that never scaled enough, the only digital currency attempt is represented by Auroracoin, a cryptocurrency that nevertheless did not endure as documented in D3.4.

On the Icelandic legal framework, only an article from the national General Penal Code relates to the issue of currency creation and circulation dating back from the 1940s.

The document from Iceland General Penal Code, Act No. 19 of 12 February 1940 states:

" Art. 154: Anyone who, acting without authority contained in Laws, fabricates, imports or hands out bonds payable to bearer and which may be used for the purpose of circulating as legal tender, irrespective of whether this be among the general public or within a specific group, or which may be expected to be used thus, shall be subject to fines or [imprisonment] 1) for up to 3 months. The provisions of the present Article do not apply to foreign banknotes."

http://www.wipo.int/wipolex/en/text.jsp?file_id=190914

By abiding to these constraints, various alternative currency services have been used in Iceland, but none of those have created bonds payable to bearer, but rather specific bonds, equivalent to business points (i.e. where points are collected from certain services for further credit or discounts), gift cards and the like. In D-CENT, Social Kronas will be represented by digital tokens and considered more as business points rather than bonds payable to the bearer. This is legitimate in that the way in which such 'social credits' are created and circulate as the result of a voting mechanism resembles more the dynamic of point awarding and less that of bond issuance. In particular, when a participant gets voted by others on Your Priorities, this happens as a result of previous engagement of the voted participant who actually contributed time and resources to the production of a proposal that others endorsed. While bonds are issued with the expectation of a future maturity given by subsequent engagements of the issuing party within market dynamics.

In terms of risk, the main question for the Icelandic pilot arises around the issue of "general purpose" currencies -- i.e., if Social Kronas start to have the same common/generic value as other currencies, they may become illegal. But then again, as long as taxes (VAT, etc) are paid as required by law, it might be hard to argue with. In order to mitigate such risk, the role of the Town Hall should be that of co-auditor

with relevant stakeholders of the way the pilot should evolve, in case, in an institutionalized public voucher and local loyalty service. In concrete, for D-CENT DSC pilot in Iceland, if we want to use digital tokens and redeem them for services such as public transport and entrances to facilities we need to be sure that coins won't be considered 'bonds payable to bearer'. If Your Priorities social credits that circulate as Social Kronas can be considered as business points, then the pilot should take place within the law.

In a nutshell, the Icelandic Freecoin implementation, Social Kronas, is an example of citizen empowerment that can be thought of as a new public service by Reykjavik Town Hall. Indeed, participatory budgeting harnesses the collective intelligence of Your Priorities participants who are voted for their ideas at the service of the community. It is then the Town Hall that gives back value by accepting Social Kronas in exchange of services or exchanging it for Icelandic Kronas and allow participants to cash them for local services – as the bus company ticketing – that nevertheless need to account in Icelandic Kronas. In these context, Social Kronas can be seen as a new way of conceiving monetary sovereignty that can nevertheless be possible only with a proficient cooperation among public and private actors within the circuit.

Appendices Legislation

Appendix 1.1 AB-1326 Virtual currency

AMENDED IN SENATE AUGUST 18, 2015

AMENDED IN SENATE JULY 06, 2015

AMENDED IN ASSEMBLY JUNE 01, 2015

AMENDED IN ASSEMBLY APRIL 20, 2015

CALIFORNIA LEGISLATURE— 2015–2016 REGULAR SESSION

ASSEMBLY BILL

No. 1326

Introduced by Assembly Member Dababneh

February 27, 2015

An act to repeal Section 107 of the Corporations Code, and to add Section 2178 to, and to add Division 11 (commencing with Section 26000) to, the Financial Code, relating to currency.

LEGISLATIVE COUNSEL'S DIGEST

AB 1326, as amended, Dababneh. Virtual currency.

(1) Existing law, the Money Transmission Act, prohibits a person from engaging in the business of money transmission in this state, or advertising, soliciting, or holding itself out as providing money transmission in this state, unless the person is licensed by the Commission of Business Oversight or exempt from licensure under the act. Existing law requires applicants for licensure to pay the commissioner a specified nonrefundable fee and to complete an application form requiring certain information. As security, existing law requires each licensee to deposit and maintain on deposit with the Treasurer cash in an amount not less than, or securities having a market value not less than, such amount as the commissioner may find and order from time to time as necessary to secure the faithful performance of the obligations of the licensee with respect to money transmission in this state. Existing law requires a licensee at all times to own eligible securities, as defined, in a specified aggregate amount not less than the amount of all of its outstanding money received for transmission, as specified.

This bill would enact the Virtual Currency Act. The bill would prohibit a person from engaging in any virtual currency business, as defined, in this state unless the person is licensed by the Commissioner of Business Oversight or is exempt from the licensure requirement, as provided. The bill would require applicants for licensure, including an applicant for licensure and approval to acquire control of a licensee,

to pay the commissioner a specified nonrefundable application fee and complete an application form required to include, among other things, information about the applicant previous virtual currency services provided by the applicant, a sample form of receipt for transactions involving the business of virtual currency, and specified financial statements. The bill would make these licenses subject to annual renewal and would require a renewal fee paid to the commissioner in a specified amount. The bill would require licensees to annually pay the commissioner a specified amount for each licensee branch office. The bill would require applicants and licensees to pay the commissioner a specified hourly amount for the commissioner's examination costs, as provided. The bill would also require the commissioner to levy an assessment each fiscal year, on a pro rata basis, on licensees in an amount sufficient to meet the commissioner's expenses in administering these provisions and to provide a reasonable reserve for contingencies.

This bill would require each licensee to maintain at all times such capital as the commissioner determines, subject to specified factors, is sufficient to ensure the safety and soundness of the licensee, its ongoing operations, and maintain consumer protection. The bill would require each licensee to maintain a bond or trust account in United States dollars for the benefit of its consumers in the form and amount as specified by the commissioner.

This bill would authorize the commissioner to examine the business and any branch office of any licensee to ascertain whether the business is being conducted in a lawful manner and all virtual currency is properly accounted for. The bill would require a licensee to file a report with the commissioner within a specified period of time after the licensee knows about the occurrence of certain events relating to the virtual currency business and those persons connected to that business, and to also maintain records as required by the commissioner for a specified period of time.

With regard to enforcement, among other things, this bill would, if it appears that a licensee is violating or failing to comply with these provisions or conducting business in an unsafe or injurious manner, authorize the commissioner to order the licensee to comply or discontinue those practices. The bill would also authorize the commissioner to issue an order suspending or revoking a license, or placing a licensee in receivership, if after notice and an opportunity for a hearing, the commissioner makes a specified finding. The bill would provide that every order, decision, or other official act of the commissioner is subject to review.

This bill would authorize the commissioner to impose a civil penalty for a violation of these provisions.

Within a specified period after the fiscal year, the bill would require a licensee to file with the commissioner a specified audit report. Within a specified period after the end of each calendar quarter, the bill would require a licensee to file with the commissioner a report containing financial statements verified by 2 of the licensee's principal officers.

By a specified date, the bill would require each licensee to file an annual report with the commissioner providing information regarding the licensee's business and operations within the state, as specified. The bill would also require each licensee to make other special reports to the commissioner. The bill would require these reports to be kept confidential. The bill would require the commissioner to prepare a report for publication on his or her Internet Web site summarizing the information from those reports and enforcement action information.

This bill would require a licensee to provide a specified consumer protection disclosure and receipt to its consumers.

This bill would authorize a virtual currency licensee in good standing that plans to engage in activities permitted under the Money Transmission Act to request that the commissioner convert his or her license into a license under the Money Transmission Act, as specified.

This bill would authorize a person or entity conducting virtual currency business with less than \$1,000,000 in outstanding obligations, as defined, and whose business model, as determined by the commissioner, represents low or no risk to consumers to- pay a \$500 application fee to the commissioner and, if approved, receive a provisional license to conduct virtual currency business. The bill would authorize the commissioner to request reports and documents, to examine the provisional licensee, and gather information regarding the business and operations of provisional licensees. The bill would require reports and documents concerning the business and operations of provisional licensees to be kept confidential.

This bill would require a licensee, under the Money Transmission Act, to report to the commissioner its plan to engage in any virtual currency business and request permission to engage in that business subject to specified requirements and conditions, as determined by the commissioner.

This bill would make these aforementioned provisions, including the Virtual Currency- Act, operative on July 1, 2016.

(2) Existing law, the General Corporation Law, prohibits a corporation, social purpose corporation, association, or individual from issuing or putting in circulation, as money, anything but the lawful money of the United States.

This bill would delete that prohibition.

(3) Existing constitutional provisions require that a statute that limits the right of access to the meetings of public bodies or the writings of public officials and agencies be adopted with findings demonstrating the interest protected by the limitation and the need for protecting that interest.

This bill would make legislative findings to that effect.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: no

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1.

Section 107 of the Corporations Code is repealed.

SEC. 2.

Section 2178 is added to the Financial Code, to read:

2178.

(a) Notwithstanding any other law and consistent with subdivision (e) of Section 26004, a licensee shall report to the commissioner its plan to engage in any virtual currency business as described in Division II (commencing with Section 26000) and request, on a form provided by the commissioner, permission

to engage in any virtual currency business without the issuance of a virtual currency license issued under Division 11 (commencing with Section 26000). However, the commissioner may require the licensee to increase its surety bond or eligible securities amounts in an amount necessary to ensure the consumer protection of the additional business. The commissioner may also place, as a condition on the authorization to engage in any virtual currency business pursuant to Division 11 (commencing with Section 26000), any condition authorized by Section 2036.

(b) This section shall become operative on July 1, 2016.

SEC. 3.

Division 11 (commencing with Section 26000) is added to the Financial Code, to read:

DIVISION 11. Virtual Currency

CHAPTER 1. General Provisions

26000.

For purposes of this division, the following definitions shall apply:

- (a) “Commissioner” means the Commissioner of Business Oversight.
- (b) (1) “Virtual currency” means any type of digital unit that is used as a medium of exchange or a form of digitally stored value.
 - (2) Virtual currency does not include the following:
 - (A) Digital units that are used solely within online gaming platforms with no market or application outside of those gaming platforms.
 - (B) Digital units that are used exclusively as part of a consumer affinity or rewards program.
 - (C) Digital units that can be redeemed for goods, services, or for purchases with the issuer or other designated merchants, but cannot be converted into, or redeemed for, fiat currency.
- (c) “Virtual currency business” means maintaining full custody or control of virtual currency in this state on behalf of others.
- (d) “Fiat currency” means government-issued currency that is designated as legal tender through government decree, regulation, or law, that customarily refers to paper money and coin and is circulated, used, and accepted as money.

26001.

For the purposes of carrying out the provisions of this division, the commissioner may adopt regulations pursuant to the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

26001.5.

This division shall be known and may be cited as the Virtual Currency Act.

CHAPTER 2. Licenses**26002.**

A person shall not engage in any virtual currency business in this state unless the person is licensed or exempt from licensure under this division.

26004.

The following are exempt from the licensing requirement described in Section 26002:

- (a) The United States or a department, agency, or instrumentality thereof, including any federal reserve bank and any federal home loan bank.
- (b) Money transmission by the United States Postal Service or by a contractor on behalf of the United States Postal Service.
- (c) A state, city, county, city and county, or any other governmental agency or governmental subdivision of a state.
- (d) A commercial bank or industrial bank, the deposits of which are insured by the Federal Deposit Insurance Corporation or its successor, or any foreign (other nation) bank that is licensed under Chapter 20 (commencing with Section 1750) of Division 1.1 or that is authorized under federal law to maintain a federal agency or federal branch office in this state; a trust company licensed pursuant to Section 1042 or a national association authorized under federal law to engage in a trust banking business; an association or federal association, as defined in Section 5102, the deposits of which are insured by the Federal Deposit Insurance Corporation or its successor; and any federally or state chartered credit union, with an office in this state, the member accounts of which are insured or guaranteed as provided in Section 14858.
- (e) Subject to Section 2178, an entity licensed as a money transmitter under the Money Transmission Act described in Division 1.2 (commencing with Section 2000).
- (f) A merchant or consumer that utilizes virtual currency solely for the purchase or sale of goods or services.
- (g) (1) A transaction in which the recipient of virtual currency is an agent of the payee pursuant to a preexisting written contract and delivery of the virtual currency to the agent satisfies the payor's obligation to the payee.
(2) For purposes of this subdivision, the following shall apply:
 - (A) "Agent" has the same meaning as that term is defined in Section 2295 of the Civil Code.
 - (B) "Payee" means the provider of goods or services, who is owed payment of money or other monetary value from the payor for the goods or services.
 - (C) "Payor" means the recipient of goods or services, who owes payment of money or monetary value to the payee for the goods or services.

- (h) A person or entity developing, distributing, or servicing a virtual currency network software.
- (i) A person or entity contributing software, connectivity, or computing power to a virtual currency network.
- (j) A person or entity providing data storage or cyber security services for a licensed virtual currency business.

26006.

- (a) An applicant for licensure under this division shall pay to the commissioner a nonrefundable application fee of five thousand dollars (\$5,000).
- (b) An applicant for a license shall do so in a form and in a medium prescribed by the commissioner by order or regulation. The application shall state or contain all of the following:
 - (1) The legal name and residential business address of the applicant and any fictitious or trade name used by the applicant in conducting its business.
 - (2) A list of any criminal convictions of the applicant and any material litigation in which the applicant has been involved in the 10-year period next preceding the submission of the application.
 - (3) A description of any virtual currency services previously provided by the applicant and the virtual currency services that the applicant seeks to provide in this state.
 - (4) A list of other states in which the applicant is licensed to engage in the business of virtual currency and any license revocations, suspensions, or other disciplinary action taken against the applicant in another state.
 - (5) Information concerning any bankruptcy or receivership proceedings affecting the licensee.
 - (6) A sample form of receipt for transactions that involve money received for the business of virtual currency.
 - (7) The name and address of any bank through which the applicant's business will be conducted.
 - (8) A description of the source of money and credit to be used by the applicant to provide virtual currency services.
 - (9) The date of the applicant's incorporation or formation and the state or country of incorporation or formation.
 - (10) A certificate of good standing from the state or country in which the applicant is incorporated or formed.
 - (11) A description of the structure or organisation of the applicant, including any parent or subsidiary of the applicant, and whether any parent or subsidiary is publicly traded.
 - (12) The legal name, any fictitious or trade name, all business and residential addresses, and the employment, in the 10-year period next preceding the submission of the application, of each executive officer, manager, director, or person that has control, of the applicant, and the educational background for each person.
 - (13) A list of any criminal convictions and material litigation in which any executive officer, manager, director, or person in control, of the applicant has been involved in the 10-year period next preceding the submission of the application.

(14) A copy of the applicant's audited financial statements for the most recent fiscal year and, if available, for the two-year period next preceding the submission of the application.

(15) A copy of the applicant's unconsolidated financial statements for the current fiscal year, whether audited or not, and, if available, for the two-year period next preceding the submission of the application.

(16) If the applicant is publicly traded, a copy of the most recent report filed with the United States Securities and Exchange Commission under Section 13 of the federal Securities Exchange Act of 1934 (15 U.S.C. Sec. 78m).

(17) If the applicant is a wholly owned subsidiary of:

(A) A corporation publicly traded in the United States, a copy of audited financial statements for the parent corporation for the most recent fiscal year or a copy of the parent corporation's most recent report filed under Section 13 of the federal Securities Exchange Act of 1934 (15 U.S.C. Sec. 78m) and, if available, for the two-year period next preceding the submission of the application.

(B) A corporation publicly traded outside the United States, a copy of similar documentation filed with the regulator of the parent corporation's domicile outside the United States.

(18) The applicant's plan for engaging in the business of virtual currency, including without limitation three years of pro forma financial statements.

(19) Any other information the commissioner requires with respect to the applicant.

(c) The commissioner may waive any of the information required under subdivision (b) or permit an applicant to submit other information instead of the required information.

(d) The nonrefundable application fee for filing an application for licensure and approval to acquire control of a licensee is three thousand five hundred dollars (\$3,500). An applicant for licensure and approval shall comply with subdivision (b).

(e) A licensee, including a licensee described in subdivision (b), shall pay annually on or before July 1, a license renewal fee of two thousand five hundred dollars (\$2,500).

(f) A licensee shall pay annually on or before July 1, one hundred twenty-five dollars (\$125) for each licensee branch office in this state.

(g) Whenever the commissioner examines a licensee, the licensee shall pay, within 10 days after receipt of a statement from the commissioner, a fee of seventy-five dollars (\$75) per hour for each examiner engaged in the examination plus, if it is necessary for any examiner engaged in the examination to travel outside this state, the travel expenses of the examiner.

(h) Whenever the commissioner examines an applicant, the applicant shall pay, within 10 days after receipt of a statement from the commissioner, a fee of seventy-five dollars (\$75) per hour for each examiner engaged in the examination plus, if it is necessary for any examiner engaged in the examination to travel outside this state, the travel expenses of the examiner.

(i) Each fee for filing an application shall be paid at the time the application is filed with the commissioner. No fee for filing an application shall be refundable, regardless of whether the application is approved, denied, or withdrawn.

26008.

(a) Each licensee shall maintain at all times such capital as the commissioner determines is sufficient to ensure the safety and soundness of the licensee and maintain consumer protection and its ongoing operations. In determining the minimum amount of capital that must be maintained by a licensee, the commissioner shall consider a variety of factors, including, but not limited to:

- (1) The composition of the licensee's total assets, including the position, size, liquidity, risk exposure, and price volatility of each type of asset.
 - (2) The composition of the licensee's total liabilities, including the size and repayment timing of each type of liability.
 - (3) The actual and expected volume of the licensee's virtual currency business activity.
 - (4) Whether the licensee is already licensed or regulated by a state or federal entity, and whether the licensee is in good standing in such capacity.
 - (5) The amount of leverage employed by the licensee.
 - (6) The liquidity position of the licensee.
 - (7) The financial protection that the licensee provides for its consumers through its trust account or bond.
- (b) Each licensee shall maintain a bond or trust account in United States dollars for the benefit of its consumers in the form and amount specified by the commissioner.

CHAPTER 3. Examinations and Records

26009.

- (a) The commissioner may at any time and from time to time examine the business and any branch office, within or outside this state, of any licensee in order to ascertain whether that business is being conducted in a lawful manner and whether all virtual currency held or exchanged is properly accounted for.
- (b) The directors, officers, and employees of any licensee being examined by the commissioner shall exhibit to the commissioner, on request, any or all of the licensee's accounts, books, correspondence, memoranda, papers, and other records and shall otherwise facilitate the examination so far as it may be in their power to do so.

26010.

The commissioner may consult and cooperate with other state or federal regulators in enforcing and administering this division. They may jointly pursue examinations and take other official action that they are otherwise empowered to take.

26011.

A licensee shall file a report with the commissioner within five business days after the licensee has reason to know of the occurrence *of* any of the following events:

(a) The filing of a petition by or against the licensee under the United States Bankruptcy Code (11 U.S.C. Secs. 101-110, incl.) for bankruptcy or reorganisation.

(b) The filing of a petition by or against the licensee for receivership, the commencement of any other judicial or administrative proceeding for its dissolution or reorganisation, or the making of a general assignment for the benefit of its creditors.

(c) The commencement of a proceeding to revoke or suspend its virtual currency business license in a state or country in which the licensee engages in such business or is licensed to engage in such business.

(d) The cancellation or other impairment of the licensee's bond or trust account as required by subdivision (b) of Section 26008.

(e) A charge or conviction of the licensee or of an executive officer, manager, director, or person in control of the licensee for a felony.

26012.

A licensee shall maintain any records as required by the commissioner for determining its compliance with this division for at least three years

CHAPTER 4. Enforcement

26013.

Any licensee may surrender its license by filing with the commissioner the license and a report with any information as the commissioner requires. The voluntary surrender of the license shall become effective at the time and upon the conditions as the commissioner specifies by order.

26014.

(a) The commissioner may prepare written decisions, opinion letters, and other formal written guidance to be issued to persons seeking clarification regarding the requirements of this division.

(b) The commissioner shall make public on the commissioner's Internet Web site all written decisions, opinion letters, and other formal written guidance issued to persons seeking clarification regarding the requirements of this division. The commissioner may, at his or her discretion or upon request by an applicant or licensee, redact proprietary or other confidential information regarding an applicant or licensee from any decision, letter, or other written guidance issued in connection with an applicant or licensee.

26015.

The commissioner may offer informal guidance to any prospective applicant for a license under this division, regarding the conditions of licensure that may be applied to that person. The commissioner shall inform any applicant that requests that guidance of the licensing requirements that will be required of that applicant, based on the information provided by the applicant concerning its plan to conduct business under this division, and the factors used to make that determination.

26016.

At any time, if the commissioner deems it necessary for the general welfare of the public, he or she may exercise any power set forth in this division with respect to a virtual currency business, regardless of

whether an application for a license has been filed with the commissioner, a license has been issued, or, if issued, the license has been surrendered, suspended, or revoked.

(a) If it appears to the commissioner that a licensee is violating or failing to comply with this division, the commissioner may direct the licensee to comply with the law by an order issued under the commissioner's official seal, or if it appears to the commissioner that any licensee is conducting its business in an unsafe or injurious manner, the commissioner may in like manner direct it to discontinue the unsafe or injurious practices. The order shall require the licensee to show cause before the commissioner, at a time and place to be fixed by the commissioner, as to why the order should not be observed.

(b) If, upon any hearing held pursuant to subdivision (a), the commissioner finds that the licensee is violating or failing to comply with any law of this state or is conducting its business in an unsafe or injurious manner, the commissioner may make a final order directing it to comply with the law or to discontinue the unsafe or injurious practices. A licensee shall comply with the final order unless, within 10 days after the issuance of the order, its enforcement is restrained in a proceeding brought by the licensee.

26017.

(a) The commissioner may issue an order suspending or revoking a license, or taking possession of and placing a licensee in receivership, if after notice and an opportunity for hearing, the commissioner finds any of the following:

(1) The licensee is violating this division or a regulation adopted or an order issued under this division, or a condition of approval issued under this division.

(2) The licensee does not cooperate with an examination or investigation by the commissioner.

(3) The licensee engages in fraud, intentional misrepresentation, or gross negligence.

(4) The competence, experience, character, or general fitness of the licensee, or any director, officer, employee, or person in control of a licensee, indicates that it is not in the public interest to permit the person to provide virtual currency services.

(5) The licensee engages in an unsafe or unsound practice.

(6) The licensee is insolvent, suspends payment of its obligations, or makes a general assignment for the benefit of its creditors.

(7) The licensee has applied for an adjudication of bankruptcy, reorganisation, arrangement, or other relief under any bankruptcy, reorganisation, insolvency, or moratorium law, or any person has applied for any such relief under that law against the licensee and the licensee has by any affirmative act approved of or consented to the action or the relief has been granted.

(8) Any fact or condition exists that, if it had existed at the time the licensee applied for its license, would have been grounds for denying the application.

(b) In determining whether a licensee is engaging in an unsafe or unsound practice, the commissioner may consider the size and condition of the licensee's provision of virtual currency services, the magnitude of the loss, the gravity of the violation of this division, and the previous conduct of the person involved.

26018.

- (a) Every order, decision, or other official act of the commissioner is subject to review in accordance with law.
- (b) Whenever the commissioner has taken possession of the property and business of any licensee, the licensee, within 10 days after that taking, if it deems itself aggrieved thereby, may apply to the superior court in the county in which the head office of the licensee is located to enjoin further proceedings. The court, after citing the commissioner to show cause why further proceedings should not be enjoined and after a hearing and a determination of the facts upon the merits, may dismiss the application or enjoin the commissioner from further proceedings and direct the commissioner to surrender the property and business to the licensee.

26019.

- (a) If the commissioner finds that any of the factors set forth in Section 26017 is true with respect to any licensee and that it is necessary for the protection of the public interest, the commissioner may issue an order immediately suspending or revoking the licensee's license.
- (b) Within 30 days after the license is suspended or revoked pursuant to subdivision (a), the licensee may file with the commissioner an application for a hearing on the suspension or revocation.
- (c) If the commissioner fails to commence a hearing within 15 business days after the application is filed with the commissioner pursuant to subdivision (b) or within a longer period of time agreed to by the licensee, the suspension or revocation shall be deemed rescinded.
- (d) Within 30 days after the hearing, the commissioner shall affirm, modify, or rescind the suspension or revocation. Otherwise, the suspension or revocation shall be deemed rescinded.
- (e) The right of the licensee to petition for judicial review of the suspension or revocation shall not be affected by the failure of the licensee to apply to the commissioner for a hearing on the suspension or revocation pursuant to subdivision (b).

26020.

The commissioner may assess a civil penalty against a person that violates this division or a regulation adopted or an order issued under this division in an amount not to exceed one thousand dollars (\$1,000) for each violation or, in the case of a continuing violation, one thousand dollars (\$1,000) for each day or part thereof during which the violation continues, plus this state's costs and expenses for the investigation and prosecution of the matter, including reasonable attorney's fees.

26022.

The enforcement provisions of this division are in addition to any other enforcement powers that the commissioner may have under law.

26023.

- (a) The commissioner may by order or regulation grant exemptions from this section in cases where the commissioner finds that the requirements of this section are not necessary or may be duplicative.

(b) A licensee shall, within 90 days after the end of each fiscal year, or within any extended time as the commissioner may prescribe, file with the commissioner an audit report for the fiscal year that shall comply with all of the following provisions:

(1) The audit report shall contain audited financial statements of the licensee for or as of the end of the fiscal year prepared in accordance with United States generally accepted accounting principles and any other information as the commissioner may require.

(2) The audit report shall be based upon an audit of the licensee conducted in accordance with United States generally accepted auditing standards and any other requirements as the commissioner may prescribe.

(3) The audit report shall be prepared by an independent certified public accountant or independent public accountant who is not unsatisfactory to the commissioner.

(4) The audit report shall include or be accompanied by a certificate of opinion of the independent certified public accountant or independent public accountant that is satisfactory in form and content to the commissioner. If the certificate or opinion is qualified, the commissioner may order the licensee to take any action as the commissioner may find necessary to enable the independent or certified public accountant or independent public accountant to remove the qualification.

(c) Each licensee shall, not more than 45 days after the end of each calendar year quarter, or within a longer period as the commissioner may by regulation or order specify, file with the commissioner a report containing all of the following:

(1) Financial statements, including balance sheet, income statement, statement of changes in shareholders' equity, and statement of cashflows, for, or as of the end of, that calendar year quarter, verified by two of the licensee's principal officers. The verification shall state that each of the officers making the verification has a personal knowledge of the matters in the report and that each of them believes that each statement in the report is true.

(2) Other information as the commissioner may by regulation or order require.

(d) Each licensee shall file an annual report with the commissioner, on or before the 15th day of March, providing the relevant information that the commissioner reasonably requires concerning the business and operations conducted by the licensee within the state during the preceding calendar year. Each licensee shall also make other special reports to the commissioner that may be required by the commissioner from time to time. The reports required by this subdivision shall be kept confidential pursuant to Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code and any regulations adopted thereunder.

(e) The commissioner shall annually prepare a report for publication on his or her Internet Web site, summarizing consolidated information gained from the reports required pursuant to subdivision (d), documenting the number of licenses, including provisional licenses as described in Section 26032, outstanding during the prior calendar year, and summarizing the numbers and types of enforcement actions brought by the commissioner pursuant to this division during the prior calendar year.

26024.

In addition to the fees provided in Section 26006, the commissioner shall levy an assessment each fiscal year, on a pro rata basis, on those licensees that at any time during the preceding calendar year engaged

in this state in the virtual currency business in an amount that is, in his or her judgment, sufficient to meet the commissioner's expenses in administering the provisions of this division and to provide a reasonable reserve for contingencies.

CHAPTER 5. Miscellaneous Provisions

26025.

A licensee shall disclose to consumers the following disclosure in a form and manner prescribed by the commissioner:

“Once submitted to the network, a virtual currency transaction will be unconfirmed for a period of time (usually less than one hour, but up to one day or more) pending sufficient confirmation of the transaction by the network. A transaction is not complete while it is in a pending state. Virtual currency associated with transactions that are in a pending state will be designated accordingly, and will not be included in your account balance or be available to conduct transactions.

The risk of loss in trading or holding virtual currency can be substantial. You should therefore carefully consider whether trading or holding virtual currency is suitable for you in light of your financial condition. In considering whether to trade or hold virtual currency, you should be aware that the price or value of virtual currency can change rapidly, decrease, and potentially even fall to zero.

(Insert company name) is licensed by the Department of Business Oversight to do business in California. If you have complaints with respect to any aspect of the virtual currency business conducted by (company name), you may contact the California Department of Business Oversight at its toll-free telephone number, 1-800-622-0620, by email at consumer.services@dbo.ca.gov, or by mail at the Department of Business Oversight, Consumer Services, 1515 K Street, Suite 200, Sacramento, CA 95814.”

26026.

(a) Upon completion of a transaction subject to this division, the licensee shall provide to the consumer a receipt containing the following information:

(1) The name and contact information of the licensee including a telephone number of the licensee where consumers can contact the licensee for questions or to register complaints.

(2) The type, value, date, and time of the transaction.

(3) The type and amount of any fees charged.

(4) The exchange rate, if applicable.

(5) A statement of the refund policy of the licensee.

(6) Additional information the commissioner may require.

(b) The receipt required by this section shall be made in English and in the language principally used by that licensee to advertise, solicit, or negotiate, either orally or in writing, if other than English.

(c) The receipt required by this section may be provided electronically for transactions that are initiated electronically or in which a consumer agrees to receive an electronic receipt.

26029.

The commissioner may, by regulation or order, either unconditionally or upon specified terms and conditions or for specified periods, exempt from all or part of this division any person or transaction or class of persons or transactions, if the commissioner finds such action to be in the public interest and that the regulation of such persons or transactions is not necessary for the purposes of this division. The commissioner shall post on the commissioner's Internet Web site a list of all persons, transactions, or classes of person or transactions exempt pursuant to this section, and the provision or provisions of this division from which they are exempt.

26031.

Notwithstanding any other law, a licensee in good standing under this division that plans to engage in activities permitted under the Money Transmission Act (Division 1.2 (commencing with Section 2000)) may request from the commissioner in a form specified by the commissioner to convert their license into a license under Division 1.2 (commencing with Section 2000). A licensee's request to convert its license shall be accompanied by documentation or other evidence as determined by the commissioner that the licensee meets the requirements for licensure under Division 1.2 (commencing with Section 2000). If a licensee's request for a converted license is granted, the licensee shall be subject to Section 2178 in order to thereafter engage in any virtual currency business.

26032.

(a)-(1) In lieu of Section 26006, a person or entity conducting virtual currency business with less than one million dollars (\$1,000,000) in outstanding obligations and whose business model, as determined by the commissioner, represents low or no risk to consumers may pay an application fee of five hundred dollars (\$500) to the commissioner and, if approved, receive a provisional license to conduct virtual currency business. A person or entity that receives such a license shall also register with FinCEN as a money services business, if applicable.

(2) For the purposes of this section, "outstanding obligations" means the value under the full custody and control of the person or entity.

(b) In determining whether to issue a provisional license, the commissioner shall consider a variety of factors, including, but not limited to:

(1) The nature and scope of the applicant's business.

(2) The anticipated volume of business to be transacted by the applicant in California.

(3) The nature and scope of the risks that the applicant's business presents to consumers.

(4) The measures which the applicant has taken to limit or mitigate the risks its business presents.

(5) Whether the applicant is regulated or otherwise authorized by another governmental entity to engage in financial services or other business activities.

(c) Sections 26006, 26008, 26023, 26024, and 26031 shall not apply to a person or entity to which a provisional license has been issued. However, the commissioner may require a provisional licensee to certify adherence to certain risk based performance standards related to safety, soundness, and consumer protection as prescribed by the commissioner.

(d) Based upon the factors identified in subdivision (b) and the provisional licensee's history as a holder of a provisional license, the commissioner may at any time renew such license for an additional length of time or remove the provisional status from the license if the licensee meets all the requirements of this division. Unless the commissioner otherwise removes the provisional status of or renews such license, a provisional license shall expire two years after the date of issuance. If the commissioner renews a provisional license, the licensee shall pay a five-hundred-dollar (\$500) renewal fee.

(e) The commissioner may request reports and documents and may examine the provisional licensee as needed to further consumer- protection, enhance safety and- soundness, and gather information regarding the business and operations of provisional licensees. Reports and documents concerning the business and operations of provisional licensees shall be kept confidential pursuant to Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code and any regulations adopted thereunder. The commissioner shall include aggregated information about the business and operations of provisional licensees in the report required by and subject to subdivision (e) of Section 26023.

(f) A provisional licensee shall notify the commissioner within 15 days of surpassing the threshold in subdivision (a) and shall, within 30 days from that notice, apply for a license pursuant to Chapter 2 (commencing with Section 26002).

(g) A provisional license may be suspended or revoked pursuant to Section 26017.

CHAPTER 6. Operative Date

26040.

This division shall become operative on July 1, 2016.

SEC. 4.

The Legislature finds and declares that Section 3 of this act, which adds Sections 26023 and 26032 to the Financial Code, imposes a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest:

In order to allow the Commissioner of Business Oversight of the Department of Business Oversight to fully accomplish his or her goals, it is imperative to protect the interests of those persons submitting information to the department to ensure that any personal or sensitive business information that this act requires those persons to submit is protected as confidential information.

Appendix 1.2 The French Law for ESS, article 1 and article 16.

JORF n°0176 du 1 août 2014 page 12666
texte n° 2

LOI

LOI n° 2014-856 du 31 juillet 2014 relative à l'économie sociale et solidaire (1)

NOR: ERNX1315311L

ELI: <http://www.legifrance.gouv.fr/eli/loi/2014/7/31/ERNX1315311L/jo/texte>

Alias: <http://www.legifrance.gouv.fr/eli/loi/2014/7/31/2014-856/jo/texte>

L'Assemblée nationale et le Sénat ont adopté,

Le Président de la République promulgue la loi dont la teneur suit :

Titre Ier : DISPOSITIONS COMMUNES

Chapitre Ier : Principes et champ de l'économie sociale et solidaire

Article 1

I. - L'économie sociale et solidaire est un mode d'entreprendre et de développement économique adapté à tous les domaines de l'activité humaine auquel adhèrent des personnes morales de droit privé qui remplissent les conditions cumulatives suivantes :

1° Un but poursuivi autre que le seul partage des bénéfices ;

2° Une gouvernance démocratique, définie et organisée par les statuts, prévoyant l'information et la participation, dont l'expression n'est pas seulement liée à leur apport en capital ou au montant de leur contribution financière, des associés, des salariés et des parties prenantes aux réalisations de l'entreprise ;

3° Une gestion conforme aux principes suivants :

a) Les bénéfices sont majoritairement consacrés à l'objectif de maintien ou de développement de l'activité de l'entreprise ;

b) Les réserves obligatoires constituées, impartageables, ne peuvent pas être distribuées. Les statuts peuvent autoriser l'assemblée générale à incorporer au capital des sommes prélevées sur les réserves constituées au titre de la présente loi et à relever en conséquence la valeur des parts sociales ou à procéder à des distributions de parts gratuites. La première incorporation ne peut porter que sur la moitié, au plus, des réserves disponibles existant à la clôture de l'exercice précédant la réunion de l'assemblée générale extraordinaire ayant à se prononcer sur l'incorporation. Les incorporations ultérieures ne peuvent porter que sur la moitié, au plus, de l'accroissement desdites réserves enregistré

depuis la précédente incorporation. En cas de liquidation ou, le cas échéant, en cas de dissolution, l'ensemble du boni de liquidation est dévolu soit à une autre entreprise de l'économie sociale et solidaire au sens du présent article, soit dans les conditions prévues par les dispositions législatives et réglementaires spéciales qui régissent la catégorie de personne morale de droit privé faisant l'objet de la liquidation ou de la dissolution.

II. - L'économie sociale et solidaire est composée des activités de production, de transformation, de distribution, d'échange et de consommation de biens ou de services mises en œuvre :

1° Par les personnes morales de droit privé constituées sous la forme de coopératives, de mutuelles ou d'unions relevant du [code de la mutualité](#) ou de sociétés d'assurance mutuelles relevant du [code des assurances](#), de fondations ou d'associations régies par la loi du 1er juillet 1901 relative au contrat d'association ou, le cas échéant, par le [code civil](#) local applicable aux départements du Bas-Rhin, du Haut-Rhin et de la Moselle ;

2° Par les sociétés commerciales qui, aux termes de leurs statuts, remplissent les conditions suivantes :

a) Elles respectent les conditions fixées au I du présent article ;

b) Elles recherchent une utilité sociale au sens de l'article 2 de la présente loi ;

c) Elles appliquent les principes de gestion suivants :

- le prélèvement d'une fraction définie par arrêté du ministre chargé de l'économie sociale et solidaire et au moins égale à 20 % des bénéfices de l'exercice, affecté à la constitution d'une réserve statutaire obligatoire, dite « fonds de développement », tant que le montant total des diverses réserves n'atteint pas une fraction, définie par arrêté du ministre chargé de l'économie sociale et solidaire, du montant du capital social. Cette fraction ne peut excéder le montant du capital social. Les bénéfices sont diminués, le cas échéant, des pertes antérieures ;

- le prélèvement d'une fraction définie par arrêté du ministre chargé de l'économie sociale et solidaire et au moins égale à 50 % des bénéfices de l'exercice, affecté au report bénéficiaire ainsi qu'aux réserves obligatoires. Les bénéfices sont diminués, le cas échéant, des pertes antérieures ;

- l'interdiction pour la société d'amortir le capital et de procéder à une réduction du capital non motivée par des pertes, sauf lorsque cette opération assure la continuité de son activité, dans des conditions prévues par décret. Le rachat de ses actions ou parts sociales est subordonné au respect des exigences applicables aux sociétés commerciales, dont celles prévues à l'[article L. 225-209-2 du code de commerce](#).

III. - Peuvent faire publiquement état de leur qualité d'entreprise de l'économie sociale et solidaire et bénéficier des droits qui s'y attachent les personnes morales de droit privé qui répondent aux conditions mentionnées au présent article et qui, s'agissant des sociétés commerciales, sont immatriculées, sous réserve de la conformité de leurs statuts, au registre du commerce et des sociétés avec la mention de la qualité d'entreprise de l'économie sociale et solidaire.

IV. - Un décret précise les conditions d'application du présent article, et notamment les règles applicables aux statuts des sociétés mentionnées au 2° du II.

[...]

Chapitre V : Dispositions diverses

Article 16

Le chapitre Ier du titre Ier du livre III du code monétaire et financier est complété par une section 4 ainsi rédigée :

« Section 4

« Les titres de monnaies locales complémentaires

« Art. L. 311-5.-Les titres de monnaies locales complémentaires peuvent être émis et gérés par une des personnes mentionnées à l'[article 1er de la loi n° 2014-856 du 31 juillet 2014](#) relative à l'économie sociale et solidaire dont c'est l'unique objet social.

« Art. L. 311-6.-Les émetteurs et gestionnaires de titres de monnaies locales complémentaires sont soumis au titre Ier du livre V lorsque l'émission ou la gestion de ces titres relèvent des services bancaires de paiement mentionnés à l'article L. 311-1, ou au titre II du même livre lorsqu'elles relèvent des services de paiement au sens du II de l'article L. 314-1 ou de la monnaie électronique au sens de l'article L. 315-1. »

Appendix 1.3 The Italian Proposed Legislation in order to regulate issuing and circulation of complementary currencies

XVII LEGISLATURA
CAMERA DEI DEPUTATI

N. 2582

PROPOSTA DI LEGGE

d'iniziativa dei deputati

BOCCADUTRI, GUERRA, GUIDESI, MARCON, MIGLIORE, ANDREA ROMANO, AIELLO, DAL
MORO, GINEFRA, GIULIETTI, GRIBAUDO, LAVAGNO, LODOLINI, MISIANI

Delega al Governo per la disciplina dell'emissione e della circolazione delle monete complementari

Presentata il 30 luglio 2014

Onorevoli Colleghi! Negli ultimi anni si è sviluppato in Europa un vasto interesse per la promozione e l'utilizzo delle monete complementari. Si tratta di strumenti di scambio che si affiancano alle valute ufficiali, senza tuttavia sostituirle.

Le monete complementari e i principi su cui si fondano hanno una forte base nel lavoro di Keynes, sia nei suoi scritti teorici sia nella sua proposta di riforma del sistema monetario elaborata in vista della conferenza di Bretton Woods.

Nella pratica esse sono state utilizzate in alcuni casi in ristretti ambiti territoriali per l'acquisto di beni e servizi, in altri all'interno di circuiti al fine di garantire la compensazione tra i crediti e i debiti derivanti da transazioni commerciali.

Le monete complementari, nella loro lunga storia, hanno avuto particolare diffusione in momenti di crisi economica: studi hanno dimostrato, infatti, che esse, da un lato, riescono ad aumentare la fiducia dei cittadini nella moneta e, dall'altro, riescono a evitare che le imprese falliscano per l'impossibilità di far fronte ai propri debiti.

Come hanno scritto Amato e Fantacci in una recente monografia sull'argomento («La moneta complementare», Bruno Mondadori, 2014): «Le monete complementari sono in grado di rafforzare i rapporti sociali nelle comunità che le usano. Nel sostenere e rafforzare il legame sociale, una moneta locale può generare maggiore sviluppo economico, minore disuguaglianza, maggiore accesso al credito e minore dipendenza da reti puramente informali o familiari. Ma una moneta complementare non è “buona” solo in virtù della sua esistenza. Per questo bisogna ben identificare le caratteristiche “desiderabili” di un sistema di moneta complementare. Da qui discende la necessità di un intervento normativo».

In Italia, nel corso degli anni, ci sono stati diversi esperimenti locali di monete complementari, dallo Scec (Solidarietà che cammina) al Sardex e numerosi sono i fenomeni tuttora esistenti.

In verità, occorre precisare che con il termine di «monete complementari» solitamente si intendono definire due fenomeni economici tra loro diversi.

Si possono distinguere, infatti, monete complementari con copertura in moneta avente corso legale (*backed currencies*), emesse in cambio del versamento di un equivalente controvalore in euro risultante dall'applicazione da un rapporto fisso di equivalenza predeterminato per le quali i soggetti emittenti garantiscono la piena convertibilità in euro, e monete scritturali di credito cooperativo (*mutual credit currencies*), costituenti l'unità di conto utilizzata all'interno di una camera di compensazione per registrare le posizioni di dare e di avere derivanti da scambi di beni o di servizi fra i partecipanti al circuito di moneta complementare sul modello della *Clearing Union* di Keynes.

Due fenomeni economici distinti, entrambi utili nella particolare fase che il Paese sta attraversando.

Le suddette monete, pur presenti in Italia in molte regioni, non hanno ancora avuto un riconoscimento legislativo. Esistono delibere e manifestazioni d'interesse, espresse dalla regione Sardegna e dalla regione Molise e un accenno all'auspicabilità di introdurre sistemi di monete complementari in una recente legge della regione Emilia-Romagna.

La regione Lombardia ha recentemente deliberato l'attivazione di un circuito sperimentale di moneta complementare di compensazione nell'ambito della legge sulla competitività e la libertà d'impresa, successivamente impugnata davanti alla Corte costituzionale.

Senza scendere nel merito delle censure del Governo sul provvedimento, che saranno poi affrontate dalla Consulta, la regione Lombardia è intervenuta probabilmente su un tema (quello della moneta, ma anche dell'ordinamento civile) che è competenza dello Stato. Ciò è dovuto anche a un vuoto legislativo che la presente proposta di legge intende sanare. Posto che le monete complementari hanno un'evidente dimensione territoriale, una volta che il quadro generale della loro ammissibilità sia sancito da una legge dello Stato e che dunque le monete complementari siano state definite nelle loro possibilità e nei loro limiti, sarà possibile anche delimitare con chiarezza i margini di azione legislativa e amministrativa delle pubbliche amministrazioni locali.

A ciò si aggiunga che le monete complementari tuttora esistenti, non sviluppandosi nell'ambito di una disciplina fissata dallo Stato, espongono chi vi partecipa a rischi enormi: nel caso delle *backed currencies*, infatti, il soggetto emittente potrebbe anche non garantire la convertibilità in euro della stessa o potrebbe emetterne una quantità fuori proporzione con i beni e con i servizi da acquistare, provocandone la svalutazione; dall'altro lato, nel caso delle *mutual credit currencies*, il gestore del circuito potrebbe assecondare, per incompetenza o per interesse, l'accumulazione di squilibri eccessivi.

Per tali motivi appare urgente una disciplina organica della materia, che si propone avvenga tramite una delega al Governo.

Solo l'esecutivo, infatti, ha le competenze per poter esaminare nel dettaglio le realtà esistenti e per stabilire una disciplina che riesca a consentire l'utilizzo delle monete complementari con piena garanzia degli interessi dei cittadini e degli utilizzatori.

La presente proposta di legge, all'articolo 1, delega pertanto il Governo ad adottare uno o più decreti legislativi per la disciplina dell'emissione e della circolazione delle monete complementari, fissando i relativi principi e criteri. L'articolo 2 della proposta di legge prevede le modalità di adozione dei decreti legislativi, nonché la copertura finanziaria.

PROPOSTA DI LEGGE

Art. 1.

1. Il Governo è delegato ad adottare, entro sei mesi dalla data di entrata in vigore della presente legge, su proposta del Ministro dello sviluppo economico, di concerto con il Ministro dell'economia e delle finanze, uno o più decreti legislativi per la disciplina dell'emissione e della circolazione delle monete complementari.

2. Nell'esercizio della delega di cui al comma 1, il Governo si attiene ai seguenti principi e criteri direttivi:

a) definire le monete complementari quali strumenti di pagamento esclusivamente elettronici volti a facilitare gli scambi di beni e di servizi, compreso il lavoro, all'interno di una comunità socio-economica definita utilizzando, anche congiuntamente, criteri di carattere territoriale o funzionale;

b) individuare i requisiti essenziali che devono avere le monete complementari, stabilendo:

1) l'obbligo di adozione, da parte dell'emittente, di un rapporto fisso di equivalenza con l'euro;

2) il divieto, a carico di coloro che accettano pagamenti in moneta complementare, di praticare, per i medesimi beni o servizi, prezzi diversi a seconda che il pagamento sia effettuato con moneta avente corso legale o con moneta complementare;

3) l'obbligo di determinare l'ambito di circolazione delle monete complementari, utilizzando, anche congiuntamente, criteri di carattere territoriale o funzionale;

4) il principio della volontarietà della partecipazione a un circuito di moneta complementare;

5) la piena tracciabilità delle transazioni effettuate mediante l'uso di moneta complementare;

c) in deroga alle disposizioni della lettera ^{a)}, consentire l'emissione di moneta complementare rappresentata da supporti materiali esclusivamente per circuiti con un controvalore complessivo del circolante inferiore a 200.000 euro e con un ambito territoriale definito;

d) distinguere le monete complementari nelle due categorie seguenti, sulla base delle caratteristiche dell'emissione:

1) monete complementari con copertura in moneta avente corso legale (^{backed currencies}), emesse in cambio del versamento di un equivalente controvalore in euro risultante dall'applicazione del rapporto fisso di equivalenza determinato ai sensi della lettera ^{b)}, numero 1), per le quali i soggetti emittenti garantiscono la piena convertibilità in euro; in particolare sono stabiliti:

1.1) l'obbligo per i soggetti emittenti di garantire la copertura totale della moneta complementare emessa, tramite il deposito del controvalore in un fondo vincolato;

1.2) le condizioni in presenza delle quali è consentita la temporanea sospensione o limitazione della possibilità di convertire in euro a vista le monete complementari;

1.3) la possibilità per l'ente emittente di imporre al detentore un tasso d'interesse negativo sulla moneta complementare nella misura in cui non sia utilizzata;

1.4) il rinvio, in quanto compatibili, alle disposizioni del testo unico delle leggi in materia bancaria e creditizia, di cui al decreto legislativo 1 settembre 1993, n. 385;

2) monete scritturali di credito cooperativo (^{mutual credit currencies}), costituenti l'unità di conto utilizzata all'interno di una camera di compensazione per registrare le posizioni di dare e avere derivanti da scambi di beni o di servizi fra i

partecipanti al circuito di moneta complementare; in particolare, deve essere stabilito che:

2.1) le posizioni attive non costituiscono crediti e non danno diritto a pagamento in euro in nessuna circostanza e a nessun titolo;

2.2) le posizioni passive sono saldate di norma attraverso la vendita di beni e servizi, ma il gestore del circuito può richiedere il pagamento in euro nel caso in cui ciò non avvenga entro un periodo non inferiore a nove mesi e non superiore a quindici mesi;

2.3) il gestore del circuito deve fissare limiti massimi di valore delle posizioni attive e passive; tali limiti devono essere simmetrici e devono essere determinati secondo criteri prudenziali e sulla base delle capacità dei soggetti partecipanti di pareggiare le loro entrate e uscite all'interno del circuito;

2.4) il gestore del circuito deve accantonare un fondo di garanzia in moneta complementare o predisporre altre forme di mutualizzazione delle perdite idonee a far fronte a eventuali insolvenze dei partecipanti;

2.5) il valore complessivo dei saldi attivi deve essere sempre commisurato al valore dei beni e dei servizi offerti in vendita all'interno del circuito;

e) stabilire che gli emittenti e i gestori di circuiti di moneta complementare sono iscritti in un apposito elenco e soggetti ad autorizzazione e sorveglianza da parte della Banca d'Italia, la quale:

1) determina i requisiti di equilibrio economico e di solidità gestionale dei soggetti di cui alla lettera ^a);

2) determina i requisiti di professionalità, di onorabilità e di indipendenza degli esponenti aziendali dei soggetti di cui alla lettera ^a), in misura adeguata alle caratteristiche del circuito, nonché dei rappresentanti negli organismi di garanzia di cui alla lettera ^f);

3) verifica il rispetto dei requisiti di cui al numero 2) e delle norme di legge da parte dei gestori;

4) vigila sul rispetto degli interessi dei partecipanti ai circuiti e del principio di prudenza;

f) stabilire che ciascun emittente di moneta complementare debba costituire un organo di garanzia, formato dai rappresentanti di tutte le categorie di partecipanti al circuito stesso, imprese, persone fisiche, pubbliche amministrazioni, organizzazioni non lucrative di utilità sociale; l'organo di garanzia assolve a funzioni di supervisione strategica e in particolare:

1) approva i criteri di emissione e le regole di circolazione della moneta complementare;

2) approva le politiche di gestione dei rischi;

3) invia una relazione semestrale alla Banca d'Italia nella quale dà conto della gestione del circuito e della tutela degli interessi dei partecipanti nonché di ogni altro aspetto rilevante;

4) è tenuto a chiedere l'intervento ispettivo della Banca d'Italia nel caso in cui ritenga che la gestione del circuito violi la legge, gli interessi dei partecipanti o il principio di prudenza;

g) riservare agli emittenti e ai gestori di circuiti di moneta complementare il cambio di moneta complementare con moneta avente valore legale, e viceversa, secondo le modalità stabilite dai decreti legislativi di cui al comma 1 e dalle regole interne dei singoli circuiti, vietando il cambio diretto tra soggetti diversi e la negoziazione della moneta complementare su mercati secondari;

h) stabilire le condizioni alle quali lo Stato e gli enti pubblici, anche territoriali, possono partecipare a circuiti di moneta complementare per i pagamenti da essi ricevuti o eseguiti e per i trasferimenti di denaro tra amministrazioni diverse o tra uffici della stessa amministrazione.

Art. 2.

1. I decreti di cui al comma 1 dell'articolo 1 della presente legge sono adottati ai sensi dell'articolo 14 della legge 23 agosto 1988, n. 400.

2. Gli schemi dei decreti legislativi di cui al comma 1 dell'articolo 1, a seguito della deliberazione preliminare del Consiglio dei ministri, sono trasmessi alla Camera dei deputati e al Senato della Repubblica perché su di essi siano espressi, entro trenta giorni dalla data di trasmissione, i pareri delle rispettive Commissioni competenti per materia e per i profili finanziari. Decorso tale termine, i decreti legislativi possono essere comunque emanati. Qualora il termine per l'espressione dei pareri parlamentari di cui al presente comma scada nei trenta giorni che precedono la scadenza del termine previsto al comma 1 dell'articolo 1 o successivamente, quest'ultimo è prorogato di tre mesi

3. Dall'attuazione della delega di cui all'articolo 1 non devono derivare nuovi o maggiori oneri a carico della finanza pubblica. Le amministrazioni competenti provvedono ai necessari adempimenti con le risorse umane, strumentali e finanziarie disponibili a legislazione vigente.

4. Entro dodici mesi dalla data di entrata in vigore dell'ultimo dei decreti legislativi di cui al comma 1 dell'articolo 1, nel rispetto dei principi e criteri direttivi stabiliti dal citato articolo 1, comma 2, e secondo le procedure previste dal presente articolo, il Governo può adottare disposizioni integrative e correttive dei decreti legislativi medesimi.

Appendix 1.4 The Spanish Law on Electronic Money

Ley 21/2011, de 26 de julio, de dinero electrónico.

Publicado en: «BOE» núm. 179, de 27/07/2011.

Entrada en vigor: 28/07/2011

Departamento: Jefatura del Estado

Referencia: BOE-A-2011-12909 - (Análisis)

CAPÍTULO I

Disposiciones generales

Artículo 1. Objeto y ámbito de aplicación.

1. El objeto de esta Ley es la regulación de la emisión de dinero electrónico, incluyendo el régimen jurídico de las entidades de dinero electrónico y la supervisión prudencial de estas entidades.

2. Se entiende por dinero electrónico todo valor monetario almacenado por medios electrónicos o magnéticos que represente un crédito sobre el emisor, que se emita al recibo de fondos con el propósito de efectuar operaciones de pago según se definen en el artículo 2.5 de la Ley 16/2009, de 13 de noviembre, de servicios de pago, y que sea aceptado por una persona física o jurídica distinta del emisor de dinero electrónico.

3. Esta Ley no se aplicará a aquel valor monetario:

- a) almacenado en instrumentos que puedan utilizarse para la adquisición de bienes o servicios únicamente en las instalaciones del emisor o, en virtud de un acuerdo comercial con el emisor, bien en una red limitada de proveedores de servicios o bien para un conjunto limitado de bienes o servicios, de acuerdo con las condiciones que se establezcan reglamentariamente;
- b) utilizado para realizar operaciones de pago exentas en virtud del artículo 3.1) de la Ley 16/2009, de 13 de noviembre, de servicios de pago.

Artículo 2. Reserva de actividad.

1. Podrán emitir dinero electrónico las siguientes categorías de emisores de dinero electrónico:

- a) Las entidades de crédito, a que se refiere el artículo 1.2 del Real Decreto Legislativo 1298/1986, de 28 de junio, sobre adaptación del Derecho vigente en materia de entidades de crédito al de las Comunidades Europeas, y cualquier sucursal en España de una entidad de crédito cuya matriz esté domiciliada o autorizada fuera de la Unión Europea.
- b) Las entidades de dinero electrónico autorizadas conforme al artículo 4 de esta Ley y cualquier sucursal en España de una entidad de dinero electrónico cuya matriz esté domiciliada o autorizada fuera de la Unión Europea.
- c) La Sociedad Estatal de Correos y Telégrafos, S.A., respecto de las actividades de emisión de dinero electrónico a que se encuentre facultada en virtud de su normativa específica.
- d) El Banco de España, cuando no actúe en su condición de autoridad monetaria.
- e) La Administración General del Estado, las Comunidades Autónomas y las Entidades Locales, cuando actúen en su condición de autoridades públicas.

2. Se prohíbe a toda persona física o jurídica distinta de las recogidas en el apartado anterior emitir, con carácter profesional, dinero electrónico tal y como se define en el artículo 1.2 de la presente Ley.

3. Las personas físicas o jurídicas que infrinjan lo dispuesto en este artículo, serán sancionadas conforme a lo dispuesto en el artículo 29 de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito, sin perjuicio de las demás responsabilidades que puedan resultar exigibles.

[Bloque 5: #cii]

CAPÍTULO II

Régimen jurídico de las entidades de dinero electrónico

[Bloque 6: #a3]

Artículo 3. Definición y reserva de denominación.

1. Tendrán la consideración de entidades de dinero electrónico aquellas personas jurídicas distintas de las contempladas en el artículo 2.1.a) de esta Ley, a las cuales se haya otorgado autorización para emitir dinero electrónico conforme a este capítulo.

2. La denominación «entidad de dinero electrónico», así como su abreviatura «EDE», quedará reservada a estas entidades, las cuales podrán incluirlas en su denominación social en la forma que reglamentariamente se determine. Las personas físicas o jurídicas que infrinjan esta reserva serán sancionadas conforme a lo previsto en el apartado 3 del artículo 2.

Artículo 4. Autorización y registro.

1. Corresponde al Ministro de Economía y Hacienda, previo informe del Banco de España y del servicio ejecutivo de la Comisión de Prevención del Blanqueo de Capitales e Infracciones Monetarias en los aspectos de su competencia, autorizar la creación de las entidades de dinero electrónico, así como el establecimiento en España de sucursales de dichas entidades autorizadas o domiciliadas en un Estado no miembro de la Unión Europea. La solicitud de autorización deberá resolverse dentro de los tres meses siguientes a su recepción o al momento en que se complete la documentación exigible. La autorización se entenderá desestimada por silencio administrativo si transcurrido ese plazo máximo no se hubiera notificado resolución expresa. La denegación de la autorización deberá motivarse.

2. La autorización para la creación de una entidad de dinero electrónico se denegará:

a) Cuando ésta carezca de una buena organización administrativa y contable o de procedimientos de control interno adecuados, que garanticen la gestión sana y prudente de la entidad.

A estos efectos, las entidades de dinero electrónico dispondrán, en condiciones proporcionadas al carácter, escala y complejidad de sus actividades, de una estructura organizativa adecuada, con líneas de responsabilidad bien definidas, transparentes y coherentes, así como de procedimientos eficaces de identificación, gestión, control y comunicación de los riesgos a los que estén o puedan estar expuestos, junto con mecanismos adecuados de control interno, incluidos procedimientos administrativos y contables sólidos.

b) Si, atendiendo a la necesidad de garantizar una gestión sana y prudente de la entidad, no se considera adecuada la idoneidad de los accionistas o socios que vayan a tener una participación significativa.

A los efectos de esta Ley se entenderá por participación significativa en una entidad de dinero electrónico española aquella que alcance, de forma directa o indirecta, al menos el 10 por ciento del

capital o de los derechos de voto de la entidad, y aquéllas que, sin llegar al porcentaje señalado, permitan ejercer una influencia notable en la entidad. Se podrá determinar reglamentariamente cuándo se deberá presumir que una persona física o jurídica puede ejercer una influencia notable.

La idoneidad se apreciará en función de:

1.º La honorabilidad comercial y profesional de los accionistas o socios. Esta honorabilidad se presumirá cuando los accionistas o socios sean Administraciones públicas;

2.º Los medios patrimoniales con que cuentan dichos accionistas o socios para atender los compromisos asumidos;

3.º La falta de transparencia en la estructura del grupo al que eventualmente pueda pertenecer la entidad, o la existencia de graves dificultades para inspeccionar u obtener la información necesaria sobre el desarrollo de sus actividades.

c) Cuando sus administradores y directivos no tengan la honorabilidad comercial y profesional requerida.

d) Cuando incumpla los requisitos de capital mínimo o los demás que reglamentariamente se establezcan para la autorización de las entidades de dinero electrónico.

e) Cuando el buen ejercicio de la supervisión de la entidad por parte del Banco de España se vea obstaculizado por la normativa vigente en un Estado no miembro de la Unión Europea que resulte aplicable a una o varias de las personas físicas o jurídicas con las que la entidad de dinero electrónico mantenga vínculos estrechos o a consecuencia de dicha reglamentación.

3. Una vez obtenida la autorización y tras su inscripción en el Registro Mercantil, las entidades de dinero electrónico deberán, antes de iniciar sus actividades, quedar inscritas en el Registro Especial de Entidades de Dinero Electrónico que se creará en el Banco de España. En ese Registro figurarán además de las entidades de dinero electrónico autorizadas, sus agentes y sucursales. En él se harán constar las actividades para las que se haya autorizado a cada entidad de dinero electrónico. El Registro será público, accesible a través de internet y se actualizará periódicamente.

4. Reglamentariamente se establecerá el régimen jurídico aplicable a la creación y condiciones de ejercicio de la actividad de las entidades de dinero electrónico, y, en particular, para el establecimiento de su capital inicial mínimo y las exigencias de recursos propios y garantías, de acuerdo con las previsiones contenidas en esta Ley.

5. Los requisitos exigibles para la autorización lo serán también, en los términos que se indiquen reglamentariamente, para conservarla.

Artículo 5. Revocación.

1. La autorización concedida a una entidad de dinero electrónico podrá ser revocada si no se hace uso de ella en un plazo de doce meses.

2. Asimismo podrá revocarse la autorización concedida a una entidad de dinero electrónico como sanción por la comisión de infracciones muy graves, de conformidad con lo establecido en el artículo 23 de esta Ley.

3. Además de por las causas señaladas en los dos apartados anteriores, sólo podrá revocarse la autorización concedida a una entidad de dinero electrónico en los siguientes supuestos:

a) Si se interrumpen de hecho las actividades específicas de su objeto social durante un período superior a seis meses.

b) Si se acredita que obtuvo la autorización por medio de declaraciones falsas o por otro medio irregular.

c) Si se incumplen las condiciones que motivaron la autorización.

d) Por renuncia expresa a la autorización.

e) Cuando constituya una amenaza para la estabilidad del sistema de pagos en caso de seguir emitiendo dinero electrónico.

4. La autorización de una sucursal de una entidad de dinero electrónico de un Estado no miembro de la Unión Europea será revocada, en cualquier caso, cuando sea revocada la autorización de la entidad de dinero electrónico que ha creado la sucursal.

5. El Ministro de Economía y Hacienda será competente para acordar la revocación.

6. Cuando el Banco de España tenga conocimiento de que a una entidad de dinero electrónico de otro Estado miembro de la Unión Europea que opera en España le ha sido revocada su autorización, acordará de inmediato las medidas pertinentes para que la entidad no inicie nuevas actividades de emisión de dinero electrónico, así como para salvaguardar los intereses de los usuarios del dinero electrónico.

7. La revocación de la autorización figurará en todos los Registros públicos pertinentes y desde su notificación a la entidad, implicará el cese de todas las operaciones amparadas por la misma.

8. Cuando se hubiese acordado la revocación de la autorización de una entidad de dinero electrónico, el Banco de España informará de ello a las autoridades supervisoras competentes de los Estados miembros donde aquella tenga una sucursal o actúe en régimen de libre prestación de servicios.

Artículo 6. Capital inicial.

Las entidades de dinero electrónico deberán disponer de un capital inicial mínimo de 350.000 euros. Éste se complementará con un volumen suficiente de recursos propios, conforme a lo establecido en el artículo siguiente

Artículo 7. Recursos propios.

1. Las entidades de dinero electrónico deberán mantener en todo momento, además del capital mínimo exigible, un volumen suficiente de recursos propios en relación con los indicadores de negocio, en los términos que reglamentariamente se establezcan. A estos efectos, los recursos propios computables se definirán de acuerdo con lo dispuesto, a los mismos efectos, para las entidades de crédito.

2. En relación con las obligaciones mencionadas en el apartado anterior, el Banco de España:

a) Podrá exceptuar a las entidades de dinero electrónico integradas en un grupo consolidable de entidades de crédito, tal y como se definen éstos en las letras a) y b) del artículo 8.3 de la Ley 13/1985, de 25 de mayo, de coeficientes de inversión, recursos propios y obligaciones de información de los intermediarios financieros, del cumplimiento individual íntegro de las exigencias de recursos propios.

b) Podrá exigir, sobre la base de la evaluación de los procesos de gestión de riesgos y de los mecanismos de control interno de la entidad de dinero electrónico, que la entidad de dinero electrónico posea una cifra de fondos propios hasta un 20 por ciento superior, o permitir que la entidad de dinero electrónico posea una cifra de recursos propios hasta un 20 por ciento inferior a

la que resulte de las exigencias mínimas de capital requeridas a la entidad conforme a las normas del apartado I de este artículo.

c) Adoptará las medidas necesarias para impedir el uso múltiple de los elementos de recursos propios cuando la entidad de dinero electrónico pertenezca al mismo grupo de otra entidad de dinero electrónico o entidad financiera, así como para asegurar una distribución adecuada dentro del grupo.

d) Podrá adoptar las medidas necesarias para garantizar la existencia de capital suficiente para la emisión de dinero electrónico, en particular, cuando las actividades de la entidad de dinero electrónico en relación con servicios distintos a la propia emisión de dinero electrónico o a los estrictamente relacionados con ella, perjudiquen o puedan perjudicar la solidez financiera de la entidad.

3. Cuando una entidad de dinero electrónico no alcance los niveles mínimos de recursos propios establecidos de conformidad con el presente artículo, la entidad deberá destinar a la formación de reservas los porcentajes de sus beneficios o excedentes líquidos que reglamentariamente se determinen, sometiendo a tal efecto su distribución a la previa autorización del Banco de España.

Artículo 8. Actividades.

1. Las entidades de dinero electrónico, cuando así se hubiera previsto en sus estatutos sociales, podrán realizar, además de la emisión de dinero electrónico, las actividades siguientes:

a) la prestación de los servicios de pago que se enumeran en el artículo 1.2 de la Ley 16/2009, de 13 de noviembre.

b) la concesión de créditos en relación con los servicios de pago contemplados en el artículo 1.2.d), e) y g) de la Ley 16/2009, de 13 de noviembre, siempre que se cumplan las siguientes condiciones:

1.º Que se trate de un crédito concedido exclusivamente en relación con la ejecución de una operación de pago;

2.º que el crédito concedido en relación con el pago, ejecutado con arreglo al artículo 11 de la Ley 16/2009, de 13 de noviembre, sea reembolsado dentro de un plazo que, en ningún caso, supere los doce meses;

3.º que dicho crédito no se conceda con cargo a los fondos recibidos o mantenidos a efectos de la ejecución de una operación de pago; y,

4.º que los fondos propios de la entidad de dinero electrónico sean en todo momento adecuados, conforme a los criterios que a tal efecto establezca el Banco de España teniendo en cuenta la cuantía total de los créditos concedidos.

Los créditos conforme a este apartado no se concederán con cargo a los fondos recibidos a cambio de dinero electrónico y salvaguardados de conformidad con el artículo 9.1 de esta Ley.

c) la prestación de servicios operativos y servicios auxiliares estrechamente vinculados en relación con la emisión de dinero electrónico o en relación con la prestación de servicios de pago a que se refiere la letra a) de este apartado.

d) la gestión de sistemas de pago, tal como se definen en el artículo 2.6 de la Ley 16/2009, de 13 de noviembre y sin perjuicio de lo dispuesto en el artículo 5 de la misma.

e) otras actividades económicas distintas de la emisión de dinero electrónico, con arreglo a la legislación de la Unión Europea y nacional aplicable.

No obstante, cuando estas actividades puedan perjudicar la solidez financiera de la entidad de dinero electrónico o puedan crear graves dificultades para el ejercicio de su supervisión, el Banco de España podrá exigirle que constituya una entidad separada para la emisión de dinero electrónico y la realización, en su caso, de las actividades previstas en la letra a) de este apartado.

2. Las entidades de dinero electrónico no podrán llevar a cabo la captación de depósitos u otros fondos reembolsables del público en el sentido del artículo 28.2.b) de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito.

3. Los fondos que el titular del dinero electrónico entregue a la entidad de dinero electrónico se cambiarán de manera inmediata por dinero electrónico. Estos fondos no constituirán depósitos u otros fondos reembolsables del público en el sentido de lo establecido en el artículo 28.2.b) de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito.

4. Tampoco constituirán depósitos u otros fondos reembolsables los fondos recibidos por las entidades de dinero electrónico en relación con las actividades recogidas en el apartado 1.a) de este artículo y que no estén vinculados a la emisión de dinero electrónico.

5. Las entidades de dinero electrónico únicamente podrán mantener cuentas de pago, tal y como se definen en el artículo 2.14 de la Ley 16/2009, de 13 de noviembre, de servicios de pago, cuyo uso exclusivo se limite a operaciones de pago. Dichas cuentas no podrán devengar intereses y quedarán sujetas a las restantes limitaciones operativas que se determinen reglamentariamente para asegurar su finalidad.

Artículo 9. Requisitos de garantía.

1. Las entidades de dinero electrónico salvaguardarán los fondos recibidos a cambio del dinero electrónico que haya sido emitido, conforme a lo previsto en el artículo 10.1.a) de la Ley 16/2009, de 13 de noviembre, de servicios de pago, en las condiciones que reglamentariamente se determinen.

Los fondos entregados a cambio de la emisión de dinero electrónico, que sean recibidos por la entidad de dinero electrónico a través de un instrumento de pago, no deberán ser salvaguardados de acuerdo con el apartado anterior hasta que no hayan sido ingresados en la cuenta de pago de la entidad de dinero electrónico o se hayan puesto de alguna otra forma a disposición de ésta, conforme a los plazos de ejecución previstos en la sección II del capítulo III del título IV de la Ley 16/2009, de 13 de noviembre, de servicios de pago, cuando resulten aplicables.

En cualquier caso, estos fondos habrán de ser salvaguardados transcurridos, como máximo, cinco días hábiles desde la emisión del dinero electrónico.

2. Se salvaguardarán asimismo conforme a lo previsto en el primer párrafo del apartado anterior los fondos recibidos por las entidades de dinero electrónico en relación con las actividades enunciadas en el artículo 8.1.a) de esta Ley que no estén vinculadas a la emisión de dinero electrónico.

3. No obstante lo anterior, el Banco de España, atendiendo a la singularidad del negocio de las entidades de dinero electrónico y con el fin de mejorar la protección de los fondos recibidos por ellas, podrá autorizar, cuando así lo solicite la entidad, la utilización del método de salvaguarda previsto en el artículo 10.1.b) de la Ley 16/2009, de 13 de noviembre, de servicios de pago, ya sea para proteger los fondos que se hayan recibido a cambio del dinero electrónico emitido, ya sea los recibidos para la prestación de servicios de pago no vinculados a dicha emisión.

4. En caso de que una entidad de dinero electrónico tenga que salvaguardar fondos con arreglo a los apartados anteriores y de que una fracción de dichos fondos se destine a emisión futura de dinero electrónico y el resto se utilice para servicios distintos de la emisión de dinero electrónico, esa

fracción de los fondos destinados a emisiones futuras de dinero electrónico también estará sujeta a los requisitos establecidos en los apartados anteriores. En caso de que dicha fracción sea variable o no se conozca con antelación, las entidades de dinero electrónico podrán aplicar los apartados anteriores sobre la base de una hipótesis acerca de la fracción representativa que se destinará a dinero electrónico, siempre que esa fracción representativa pueda ser objeto, a satisfacción del Banco de España, de una estimación razonable a partir de datos históricos.

Artículo 10. Información contable.

Respecto de las normas de contabilidad y los modelos a que deberán sujetarse las cuentas anuales de las entidades de dinero electrónico, así como a las previsiones relativas a la auditoría de cuentas anuales, obligaciones de los auditores e información específica en la memoria, se estará a lo dispuesto en el artículo 14 de la Ley 16/2009, de 13 de noviembre, de servicios de pago.

En particular, en lo que se refiere a la obligación de informar separadamente en la memoria de las cuentas anuales, de los activos, pasivos, ingresos y gastos correspondientes a las distintas actividades desarrolladas por las entidades de dinero electrónico, tal obligación deberá observarse respecto de las partidas correspondientes a la emisión de dinero electrónico, a la prestación de servicios de pago no vinculados a dicha emisión y a las restantes actividades, de forma que los tres grupos de actividades aparezcan claramente identificados.

CAPÍTULO III

Actividad transfronteriza de las entidades de dinero electrónico

Artículo 11. Apertura de sucursales y libre prestación de servicios en un Estado miembro de la Unión Europea por entidades de dinero electrónico españolas.

1. Las entidades de dinero electrónico españolas que pretendan emitir dinero electrónico o prestar servicios de pago no vinculados a dicha emisión en otro Estado miembro de la Unión Europea, bien mediante el establecimiento de una sucursal o en régimen de libre prestación de servicios, deberán comunicarlo previamente al Banco de España.

A la comunicación se acompañará, al menos, la siguiente información:

a) Un programa de actividades en que se indiquen, en particular, las operaciones que la entidad de dinero electrónico pretenda llevar a cabo y, en su caso, la estructura de la organización de la sucursal y su domicilio social.

b) El nombre y la trayectoria profesional de los directivos responsables de la sucursal.

2. En el plazo máximo de un mes a contar desde la recepción de dicha comunicación, el Banco de España deberá comunicar a las autoridades competentes del Estado de acogida:

a) El nombre y la dirección de la entidad de dinero electrónico.

b) Los nombres de las personas responsables de la gestión de la sucursal así como su estructura organizativa y su domicilio social, y

c) Las actividades que pretenda llevar a cabo.

Reglamentariamente se determinará la forma de proceder en el caso de que la entidad pretenda efectuar cambios que entrañen modificación de las informaciones comunicadas al Banco de España.

Artículo 12. Apertura de sucursales y libre prestación de servicios en España por entidades de dinero electrónico autorizadas en otro Estado miembro de la Unión Europea.

1. Las entidades de dinero electrónico de la Unión Europea que no se hayan acogido total o parcialmente a las excepciones previstas en el artículo 9 de la Directiva 2009/110/CE, podrán emitir dinero electrónico o prestar servicios de pago no vinculados a dicha emisión, bien mediante apertura de sucursal, bien en régimen de libre prestación de servicios.

Estas entidades deberán respetar en el ejercicio de su actividad en España las disposiciones dictadas por razones de interés general.

2. Recibida por el Banco de España una comunicación de la autoridad supervisora de la entidad de dinero electrónico, que contenga, al menos, la información prevista en el apartado 2 del artículo 11 de esta Ley, y cumplidos los demás requisitos que reglamentariamente se determinen, se procederá a inscribir la sucursal en el correspondiente Registro Especial de Entidades de Dinero Electrónico, momento a partir del cual podrá la sucursal iniciar sus actividades en España.

Reglamentariamente se determinará la forma de proceder en el caso de que la entidad pretenda efectuar cambios que entrañen modificación de las informaciones comunicadas al Banco de España.

3. Las entidades de dinero electrónico autorizadas en otro Estado miembro de la Unión Europea podrán iniciar en España su actividad en régimen de libre prestación de servicios tan pronto como el Banco de España reciba una comunicación de su autoridad supervisora indicando qué actividades pretenden realizar en España. Este régimen será también de aplicación cuando la entidad de dinero electrónico pretenda iniciar por primera vez en España alguna otra actividad distinta a la emisión de dinero electrónico y la prestación de servicios de pago a que se refiere el artículo 8.1.a) de esta Ley.

4. Las entidades de dinero electrónico autorizadas en otro Estado miembro de la Unión Europea, podrán distribuir dinero electrónico en España mediante la contratación, para tal fin, de una o varias personas físicas o jurídicas. Para poder realizar tal actividad en España, el Banco de España habrá de recibir, con las condiciones que reglamentariamente se determinen, una comunicación de su autoridad supervisora indicando qué actividades pretenden realizar en España y los nombres de las personas responsables de la red de distribuidores así como su estructura organizativa y su domicilio social.

Artículo 13. Actividad de las entidades de dinero electrónico españolas en un Estado no miembro de la Unión Europea.

La emisión de dinero electrónico en Estados no miembros de la Unión Europea por parte de entidades de dinero electrónico españolas, incluso mediante la creación o adquisición de filiales, quedará sujeta, en los términos que reglamentariamente se determinen, a la previa autorización del Banco de España.

CAPÍTULO IV

Otras disposiciones relativas a las entidades de dinero electrónico

Artículo 14. Delegación de la prestación de funciones operativas.

1. Reglamentariamente se establecerán las condiciones en que las entidades de dinero electrónico podrán delegar la prestación de funciones operativas.

2. Las entidades de dinero electrónico que recurran a terceros para la realización de funciones operativas adoptarán las medidas necesarias para garantizar el cumplimiento de los requisitos establecidos en esta Ley. Las entidades de dinero electrónico serán plenamente responsables de los actos de sus empleados y de cualesquiera agentes, sucursales, instituciones o personas en las que se haya delegado la prestación de funciones operativas.

Artículo 15. Agentes.

1. Las entidades de dinero electrónico no emitirán dinero electrónico por intermediación de agentes.

2. Las entidades de dinero electrónico estarán capacitadas para prestar los servicios de pago a que se refiere el artículo 8.1.a) de esta Ley por intermediación de agentes únicamente si se cumplen las condiciones establecidas en el artículo 12 de la Ley 16/2009, de 13 de noviembre, de servicios de pago, y sus normas de desarrollo.

3. Las entidades de dinero electrónico podrán distribuir y rembolsar dinero electrónico por intermediación de personas físicas o jurídicas que actúen en su nombre. Si la entidad de dinero electrónico desea distribuir dinero electrónico en otro Estado miembro contratando a una persona física o jurídica, deberá seguir el procedimiento establecido en el artículo 11 de esta Ley, con las especialidades que reglamentariamente se determinen.

Artículo 16. Conservación de documentos.

Las entidades de dinero electrónico conservarán todos los documentos necesarios a efectos de esta Ley durante, al menos, cinco años, sin perjuicio de lo dispuesto en la Ley 10/2010, de 28 de abril, de prevención del blanqueo de capitales y de la financiación del terrorismo y sus disposiciones de desarrollo, así como en otras disposiciones de la Unión Europea o nacionales aplicables.

CAPÍTULO V

Emisión y reembolso de dinero electrónico

Artículo 17. Emisión y reembolso.

1. Los emisores de dinero electrónico emitirán, al recibo de los fondos, dinero electrónico por su valor nominal.

2. Los emisores de dinero electrónico reembolsarán al titular del mismo, cuando éste lo solicite, en todo momento y por su valor nominal, el valor monetario del dinero electrónico de que disponga.

3. El contrato entre el emisor de dinero electrónico y el titular del dinero electrónico estipulará clara y explícitamente las condiciones de reembolso, incluidos los gastos conexos, y se informará de esas condiciones al titular del dinero electrónico antes de que éste quede sujeto a un contrato u oferta.

4. El reembolso podrá estar sujeto a gastos únicamente si así se estipula en el contrato de conformidad con el apartado anterior y sólo en alguno de los siguientes casos:

a) cuando el reembolso se solicite antes de la finalización del contrato.

b) cuando el contrato determine una fecha de finalización y el titular del dinero electrónico haya resuelto el contrato con anterioridad a dicha fecha.

c) cuando el reembolso se solicite una vez transcurrido un año desde la fecha de finalización del contrato.

Todo gasto será proporcional y adecuado a los costes reales en que incurra el emisor de dinero electrónico.

5. Cuando el reembolso se solicite antes de la finalización del contrato, el titular del dinero electrónico podrá solicitar el reembolso total o parcial.

6. Cuando el titular del dinero electrónico solicite el reembolso en la fecha de finalización del contrato o hasta un año después de dicha fecha:

a) Se reembolsará el valor monetario total del dinero electrónico que se posea.

b) Cuando una entidad de dinero electrónico realice una o varias de las actividades que se enumeran en el artículo 8.1.e) de esta Ley, y se desconozca de antemano el porcentaje de fondos que se va a utilizar como dinero electrónico, se reembolsarán al titular del dinero electrónico todos los fondos que solicite.

7. Los derechos de reembolso de las personas físicas o jurídicas que acepten dinero electrónico se registrarán por las estipulaciones contractuales acordadas con el emisor de dinero electrónico. No obstante, lo previsto en los apartados 4, 5 y 6 anteriores les será de aplicación cuando soliciten el reembolso en su condición de titulares de dinero electrónico.

Artículo 18. Prohibición de intereses.

Se prohíbe la concesión de intereses o cualquier otro beneficio relacionado con el tiempo durante el cual un titular de dinero electrónico está en posesión de dinero electrónico.

Artículo 19. Procedimientos de reclamación y recurso extrajudicial para la solución de litigios.

En sus relaciones con los titulares de dinero electrónico y, en su caso, con los usuarios de servicios de pago no vinculados a dicha emisión, será de aplicación a los emisores de dinero electrónico lo dispuesto en el artículo 50 de la Ley 16/2009, de 13 de noviembre, de servicios de pago, con las adaptaciones que reglamentariamente se determinen.

CAPÍTULO VI

Régimen de supervisión y sancionador de las entidades de dinero electrónico

Artículo 20. Supervisión.

1. Corresponderá al Banco de España el control e inspección de las entidades de dinero electrónico y su inscripción en el Registro Especial de Entidades de Dinero Electrónico que se creará al efecto. El citado control e inspección se realizará en el marco de lo establecido por el artículo 43 bis de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito, con las adaptaciones que reglamentariamente se determinen. Esta competencia se extenderá a cualquier oficina o centro, dentro o fuera del territorio español, y, en la medida en que el cumplimiento de las funciones encomendadas al Banco de España lo exija, a las sociedades que se integren en el grupo de la afectada.

A estos efectos, el Banco de España podrá recabar de las entidades y personas sujetas a su supervisión cuanta información sea necesaria para comprobar el cumplimiento de la normativa de

ordenación y disciplina a que aquéllas estén sujetas. Con el fin de que el Banco de España pueda obtener dicha información o confirmar su veracidad, las entidades y personas mencionadas quedan obligadas a poner a disposición del Banco cuantos libros, registros y documentos considere precisos, incluidos los programas informáticos, ficheros y bases de datos, sea cual sea su soporte, físico o virtual.

También podrá emitir guías de acuerdo con lo previsto en el artículo 10 bis.l.d) de la Ley 13/1985, de 25 de mayo, de coeficientes de inversión, recursos propios y obligaciones de información de los intermediarios financieros.

2. El Banco de España deberá informar a las autoridades competentes del Estado miembro de acogida siempre que desee efectuar inspecciones in situ en el territorio de este último. El Banco de España podrá encomendar a las autoridades competentes del Estado miembro de acogida la realización de inspecciones in situ en la entidad de que se trate.

3. El Banco de España podrá, en el ejercicio de sus propias competencias de control, en particular en lo que se refiere al adecuado funcionamiento del sistema de pagos, inspeccionar las sucursales de entidades de dinero electrónico autorizadas en otros Estados miembros de la Unión Europea. Asimismo, podrá asumir la realización de las inspecciones que en relación con esas sucursales le hayan sido encomendadas por las autoridades supervisoras del Estado miembro donde la entidad haya sido autorizada.

4. Para el adecuado ejercicio de sus funciones, el Banco de España podrá recabar de las sucursales de las entidades de dinero electrónico de la Unión Europea la misma información que exija a las entidades españolas.

5. La supervisión del Banco de España podrá alcanzar igualmente a las personas españolas que controlen entidades de dinero electrónico de otros Estados miembros de la Unión Europea, dentro del marco de la colaboración con las autoridades responsables de la supervisión de dichas entidades.

6. Las resoluciones que dicte el Banco de España en el ejercicio de las funciones a que se refieren los apartados anteriores serán susceptibles de recurso ante el Ministro de Economía y Hacienda.

7. Las medidas de intervención y de sustitución previstas en el título III y el artículo 62 de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito, podrán aplicarse a las entidades de dinero electrónico.

Artículo 21. Régimen de participaciones significativas.

1. Cualquier persona física o jurídica que, por sí sola o actuando de forma concertada, haya adoptado la decisión de adquirir o ceder, directa o indirectamente, una participación significativa en una entidad de dinero electrónico española, notificará previamente al Banco de España su intención de efectuar dicha adquisición o cesión.

De manera análoga, cualquier persona física o jurídica que, por sí sola o actuando de manera concertada, haya adoptado la decisión de aumentar o reducir, directa o indirectamente, su participación significativa en una entidad de dinero electrónico, como consecuencia de lo cual su porcentaje del capital o de derechos de voto poseídos ascendería, sobrepasaría o caería por debajo del 20 por ciento, el 30 por ciento o el 50 por ciento, o pasaría a controlar la entidad de dinero electrónico o dejaría de hacerlo, notificará previamente al Banco de España su intención de efectuar dicho aumento o reducción.

Se entenderá que existe una relación de control a los efectos de este artículo siempre que se dé alguno de los supuestos previstos en el artículo 42 del Código de Comercio.

2. El adquirente propuesto deberá facilitar al Banco de España información que indique el volumen de dicha participación así como la información pertinente a la que hace referencia el artículo 57.1 de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito.

3. El Banco de España dispondrá de un plazo de sesenta días hábiles, a contar desde la fecha en que haya efectuado el acuse de recibo de la notificación a la que se refiere el apartado 1 anterior, para valorar si la influencia ejercida por el adquirente propuesto puede ir en detrimento de una gestión sana y prudente de la entidad y, en su caso, oponerse a la adquisición propuesta. El acuse de recibo se realizará por escrito en el plazo de dos días hábiles a contar desde la fecha de la recepción de la notificación por el Banco de España, siempre que ésta se acompañe de toda la información que resulte exigible conforme a este artículo, y en él se indicará al adquirente potencial la fecha exacta en que expira el plazo de evaluación.

4. Cuando se efectúe una de las adquisiciones reguladas en este artículo sin haber notificado previamente al Banco de España, o, habiéndole notificado, mediara la oposición expresa del Banco de España, formulada en el plazo previsto en el apartado anterior, se producirán los siguientes efectos:

a) En todo caso y de forma automática, no se podrán ejercer los derechos políticos correspondientes a las participaciones adquiridas irregularmente. Si, no obstante, llegaran a ejercerse, los correspondientes votos serán nulos y los acuerdos serán impugnables en vía judicial, según lo previsto en el capítulo IX del título V del Real Decreto Legislativo 1/2010, de 2 de julio, por el que se aprueba el Texto Refundido de la Ley de sociedades de capital, estando legitimado al efecto el Banco de España.

b) Si fuera preciso, se acordará la intervención de la entidad o la sustitución de sus administradores, según lo previsto en el título III de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito.

Además, se impondrán las sanciones previstas en el título I de la misma Ley.

Artículo 22. Información y secreto profesional.

1. En el ejercicio de sus funciones de supervisión e inspección de las entidades de dinero electrónico, el Banco de España colaborará con las autoridades que tengan encomendadas funciones semejantes en otros Estados miembros de la Unión Europea y podrá comunicar informaciones relativas a la dirección, gestión y propiedad de estas entidades, así como las que puedan facilitar el control de solvencia de las mismas y su supervisión o sirva para evitar, perseguir o sancionar conductas irregulares; igualmente, podrá suscribir, a tal efecto, acuerdos de colaboración.

En el caso de que las autoridades competentes no pertenezcan a otro Estado miembro de la Unión Europea, el suministro de estas informaciones exigirá que exista reciprocidad y que las autoridades competentes se hallen sujetas al deber de secreto profesional en condiciones que, como mínimo, sean equiparables a las establecidas por las leyes españolas.

En el caso de que las autoridades competentes pertenezcan a otro Estado miembro de la Unión Europea, el Banco de España facilitará a las interesadas, por propia iniciativa, cualquier información que sea esencial para el ejercicio de sus tareas de supervisión, y, cuando se le solicite, toda información pertinente a iguales fines.

2. Será asimismo de aplicación lo dispuesto en el artículo 6 del Real Decreto Legislativo 1298/1986, de 28 de junio, sobre adaptación del derecho vigente en materia de Entidades de Crédito al de las Comunidades Europeas, tanto a los efectos previstos en el apartado anterior como a los restantes contemplados en el propio artículo.

3. Adicionalmente, el Banco de España podrá intercambiar información que sea relevante para el ejercicio de sus respectivas competencias con:

a) El Banco Central Europeo y los bancos centrales nacionales de los Estados miembros de la Unión Europea, en su calidad de autoridades monetarias y de supervisión, y, en su caso, con otras autoridades públicas responsables de la vigilancia de los sistemas de pago y liquidación;

b) otras autoridades pertinentes designadas en virtud de la presente Ley, de la Ley Orgánica 15/1999, de 13 de diciembre, de protección de datos de carácter personal, de la Ley 10/2010, de 28 de abril, de prevención del blanqueo de capitales y de la financiación del terrorismo, sus disposiciones de desarrollo y de otras disposiciones de Derecho de la Unión Europea aplicables a los emisores de dinero electrónico.

Artículo 23. Régimen sancionador.

1. A las entidades de dinero electrónico les será de aplicación, con las adaptaciones que reglamentariamente se determinen, el régimen sancionador previsto en la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito. Dicho régimen alcanzará también a las personas físicas o jurídicas que posean una participación significativa en una entidad de dinero electrónico.

2. Tendrán la consideración de normas de ordenación y disciplina de los emisores de dinero electrónico a los que se refieren las letras a) y b) del artículo 2.1 las disposiciones contenidas en esta Ley. Su incumplimiento será sancionado como infracción grave, siempre que las mismas no tengan carácter ocasional o aislado, de acuerdo con lo previsto en la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito.

Disposición transitoria. Régimen transitorio para las entidades de dinero electrónico autorizadas conforme al artículo 21 de la Ley 44/2002, de 22 de noviembre, de medidas de reforma del sistema financiero.

1. Las entidades de dinero electrónico que hubieran sido autorizadas para la emisión de dinero electrónico antes del 30 de abril de 2011, conforme a lo establecido en el artículo 21 de la Ley 44/2002, de 22 de noviembre, de medidas de reforma del sistema financiero, podrán seguir emitiendo dinero electrónico en España o en cualquier otro Estado miembro de la Unión Europea, de conformidad con los acuerdos de reconocimiento mutuo mencionados en la Directiva 2000/46/CE del Parlamento Europeo y del Consejo, de 18 de septiembre de 2000, sobre el acceso a la actividad de las entidades de dinero electrónico y su ejercicio así como la supervisión cautelar de dichas entidades. Para ello, no será preciso solicitar la autorización prevista en el artículo 4 y no estarán obligadas al cumplimiento de aquellas otras disposiciones de esta Ley que se determinen reglamentariamente.

2. Las entidades de dinero electrónico a que se refiere el apartado anterior deberán presentar antes del 30 de octubre de 2011 ante la Dirección General del Tesoro y Política Financiera la información pertinente de acuerdo con lo establecido en el artículo 4, a fin de que pueda determinarse si dichas entidades se ajustan a los requisitos establecidos en esta Ley y, en caso de que no sea así, las medidas que han de adoptarse para garantizar su cumplimiento o si procede retirar la autorización.

Las entidades de dinero electrónico que reúnan los requisitos anteriores serán autorizadas e inscritas en el Registro Especial de Entidades de Dinero Electrónico del Banco de España, según lo establecido en el artículo 4.

4. Se prohibirá la emisión de dinero electrónico a aquellas entidades de dinero electrónico que no hayan acreditado a 30 de octubre de 2011 el cumplimiento de los requisitos establecidos en esta Ley.

Disposición derogatoria.

Quedan derogadas cuantas normas de igual o inferior rango se opongan a lo dispuesto en la presente Ley y, en particular, el artículo 21 de la Ley 44/2002, de 22 de noviembre, de medidas de reforma del sistema financiero y el Real Decreto 322/2008, de 29 de febrero, sobre el régimen jurídico de las entidades de dinero electrónico

Disposición final primera. Modificación del Real Decreto Legislativo 1298/1986, de 28 de junio, sobre adaptación del Derecho vigente en materia de entidades de crédito al de las Comunidades Europeas.

El artículo 1 del Real Decreto Legislativo 1298/1986, de 28 de junio, sobre adaptación del Derecho vigente en materia de entidades de crédito al de las Comunidades Europeas, queda redactado de la siguiente forma:

«Artículo 1. Definición.

1. A efectos de la presente disposición, y de acuerdo con la Directiva 2000/12/CE del Parlamento Europeo y del Consejo, de 20 de marzo de 2000, relativa al acceso a la actividad de las entidades de crédito y a su ejercicio, se entiende por «entidad de crédito» toda empresa que tenga como actividad típica y habitual recibir fondos del público en forma de depósito, préstamo, cesión temporal de activos financieros u otras análogas que lleven aparejada la obligación de su restitución, aplicándolos por cuenta propia a la concesión de créditos u operaciones de análoga naturaleza.

2. Se conceptúan entidades de crédito:

- a) El Instituto de Crédito Oficial.
- b) Los Bancos.
- c) Las Cajas de Ahorros y la Confederación Española de Cajas de Ahorros.
- d) Las Cooperativas de Crédito.
- e) Los Establecimientos Financieros de Crédito.»

Disposición final segunda. Modificación de la Ley 24/1988, de 28 de julio, del Mercado de Valores.

La Ley 24/1988, de 28 de julio, del Mercado de Valores, queda modificada como sigue:

Uno. Se modifica el artículo 22, que queda redactado con el siguiente tenor:

«El Comité Consultivo de la Comisión Nacional del Mercado de Valores es el órgano de asesoramiento de su Consejo. Dicho Comité será presidido por el Vicepresidente de la Comisión, que no dispondrá de voto en relación con sus informes, siendo el número de sus consejeros y la forma de su designación los que reglamentariamente se determinen. Los consejeros serán designados en representación de las infraestructuras de mercado, de los emisores, de los inversores, de las entidades de crédito y entidades aseguradoras, de los colectivos profesionales designados por la Comisión Nacional del Mercado de Valores y de los fondos de garantía de inversiones, más otro representante designado por cada una de las Comunidades Autónomas con competencias en materia de mercados de valores en cuyo territorio exista un mercado secundario oficial.»

Dos. El artículo 23 queda redactado con el siguiente tenor:

«El Comité Consultivo de la Comisión Nacional del Mercado de Valores informará sobre cuantas cuestiones le sean planteadas por el Consejo.

Su informe será preceptivo en relación con:

a) Las disposiciones de la Comisión Nacional del Mercado de Valores a que hace referencia el artículo 15 de esta Ley.

b) La autorización, la revocación y las operaciones societarias de las empresas de servicios de inversión y de las restantes personas o entidades que actúen al amparo del artículo 65.2, cuando así se establezca reglamentariamente, atendiendo a su trascendencia económica y jurídica.

c) La autorización y revocación de las sucursales de empresas de servicios de inversión de países no miembros de la Unión Europea, y los restantes sujetos del Mercado de Valores, cuando así se establezca reglamentariamente, teniendo en cuenta la relevancia económica y jurídica de tales sujetos.

Sin perjuicio de su carácter de órgano consultivo del Consejo de la Comisión Nacional del Mercado de Valores, el Comité Consultivo informará los proyectos de disposiciones de carácter general sobre materias directamente relacionadas con el mercado de valores que le sean remitidos por el Gobierno o por el Ministerio de Economía y Hacienda con el objeto de hacer efectivo el principio de audiencia de los sectores afectados en el procedimiento de elaboración de disposiciones administrativas.»

Tres. Se modifica el apartado 3 del artículo 87 bis que queda redactado como sigue:

«3. Asimismo, cuando una empresa de servicios de inversión no cumpla con las exigencias que, contenidas en esta Ley o en su normativa de desarrollo, determinen requerimientos mínimos de recursos propios o requieran una estructura organizativa o mecanismos y procedimientos de control interno, contables o de valoración adecuados, la Comisión Nacional del Mercado de Valores podrá adoptar, entre otras, las siguientes medidas:

a) Obligar a las empresas de servicios de inversión y sus grupos a mantener recursos propios adicionales a los exigidos con carácter mínimo. La Comisión Nacional del Mercado de Valores deberá hacerlo, al menos, siempre que aprecie deficiencias graves en la estructura organizativa de la empresa de servicios de inversión o en los procedimientos y mecanismos de control interno, contables o de valoración, incluyendo en especial los mencionados en el artículo 70.3 de la presente Ley, o siempre que determine, de acuerdo con lo previsto en el artículo 87 bis l.c), que los sistemas y los fondos propios mantenidos a que se refiere dicho precepto no garantizan una gestión y cobertura sólidas de los riesgos. En ambos casos la medida deberá ser adoptada cuando la Comisión Nacional del Mercado de Valores considere improbable que la mera aplicación de otras medidas mejore dichas deficiencias o situaciones en un plazo adecuado.

b) Exigir a las empresas de servicios de inversión y sus grupos que refuercen o modifiquen los procedimientos de control interno, contables o de valoración, los mecanismos o las estrategias adoptados para el cumplimiento de dichas exigencias organizativas o de recursos.

c) Exigir a las empresas de servicios de inversión y sus grupos la aplicación de una política específica, bien de dotación de provisiones, bien de reparto de dividendos o de otro tipo de tratamiento para los activos sujetos a ponderación a efectos de las exigencias de recursos propios, bien de reducción del riesgo inherente a sus actividades, productos o sistemas.

d) Restringir o limitar los negocios, las operaciones o la red de las empresas de servicios de inversión.

e) Exigir a las empresas de servicios de inversión y sus grupos que limiten la remuneración variable en forma de porcentaje de los ingresos netos totales cuando ello no sea compatible con el mantenimiento de una base de capital sólida.

f) Exigir a las empresas de servicios de inversión y sus grupos que utilicen beneficios netos para reforzar su base de capital.

Lo dispuesto en este apartado se entiende sin perjuicio de la aplicación de las sanciones que en cada caso procedan de acuerdo con los preceptos establecidos en esta Ley.»

Cuatro. Se modifica la letra b) del artículo 100, que queda redactada como sigue:

«b) La falta de elaboración o de publicación del informe anual de gobierno corporativo o del informe anual sobre remuneraciones de los consejeros a que se refieren respectivamente los artículos 61 bis y 61 ter, o la existencia en dichos informes de omisiones o datos falsos o engañosos; el incumplimiento de las obligaciones establecidas en los artículos 512, 513, 514, 516 y 517 del texto refundido de la Ley de Sociedades de Capital, aprobado por Real Decreto Legislativo 1/2010, de 2 de julio; y el carecer las entidades emisoras de valores admitidos a negociación en mercados secundarios oficiales de un Comité de Auditoría, en los términos establecidos en la disposición adicional decimoctava de esta Ley.»

Cinco. Se suprime la letra b bis) del artículo 100.

Seis. Se modifica la letra h) del artículo 102 que queda redactada como sigue:

«h) Separación del cargo de administración o dirección que ocupe el infractor en cualquier entidad financiera, con inhabilitación para ejercer cargos de administración o dirección en cualquier otra entidad de las previstas en el artículo 84.1 y 84.2.b), c bis) y d) por plazo no superior a diez años.»

Disposición final tercera. Modificación de la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito.

Uno. El artículo 28.2 queda redactado del siguiente modo:

«2. Se entenderán, en particular, reservadas a las entidades de crédito:

a) La actividad definida en el apartado 1 del artículo 1 del Real Decreto Legislativo 1298/1986, de 28 de junio, sobre adaptación del Derecho vigente en materia de entidades de crédito al de las Comunidades Europeas.

b) La captación de fondos reembolsables del público, cualquiera que sea su destino, en forma de depósito, préstamo, cesión temporal de activos financieros u otras análogas que no estén sujetas a las normas de ordenación y disciplina del mercado de valores.»

Dos. Se modifica el apartado 1 quáter del artículo 43 bis que queda redactado como sigue:

«1 quáter. El Banco de España podrá comunicar y requerir a las entidades sujetas a sus facultades de supervisión, inspección y sanción previstas en esta Ley, por medios electrónicos, las informaciones y medidas recogidas en esta Ley y en sus disposiciones de desarrollo. Las entidades referidas tendrán obligación de habilitar, en el plazo que se fije para ello, los medios técnicos requeridos por el Banco de España para la eficacia de sus sistemas de comunicación electrónica, en los términos que éste adopte al efecto.»

Tres. Se añade una nueva letra ñ) al artículo 52 con el siguiente contenido:

«ñ) La emisión de dinero electrónico.»

Disposición final cuarta. Modificación de la Ley 35/2003, de 4 de noviembre, de instituciones de inversión colectiva.

Se modifica el apartado I del artículo 88 de la Ley 35/2003, de 4 de noviembre, de instituciones de inversión colectiva, que queda redactado como sigue:

«I. Las sanciones aplicables en cada caso por la comisión de infracciones muy graves, graves o leves se determinarán en base a los criterios recogidos en el artículo 131.3 de la Ley 30/1992, de 26 de noviembre, de Régimen Jurídico de las Administraciones Públicas y del Procedimiento Administrativo Común, y los siguientes:»

Disposición final quinta. Modificación del texto refundido de la Ley sobre responsabilidad civil y seguro en la circulación de vehículos a motor, aprobado por el Real Decreto Legislativo 8/2004, de 29 de octubre.

Se modifica la letra c) del apartado I del artículo 11 del Texto Refundido de la Ley sobre responsabilidad civil y seguro en la circulación de vehículos a motor, aprobado por el Real Decreto Legislativo 8/2004, de 29 de octubre, que pasa a tener la siguiente redacción:

«c) Indemnizar los daños, a las personas y en los bienes, ocasionados en España por un vehículo que esté asegurado y haya sido objeto de robo o robo de uso.

Los daños a las personas y en los bienes ocasionados en otro Estado por un vehículo con estacionamiento habitual en España que esté asegurado y haya sido robado o robado de uso se indemnizarán por el Consorcio de Compensación de Seguros cuando el fondo nacional de garantía de ese Estado no asuma funciones de indemnización de los daños producidos por vehículos robados.»

Disposición final sexta. Modificación de la Ley 25/2005, de 24 de noviembre, reguladora de las entidades de capital riesgo y de sus sociedades gestoras.

Se modifica el artículo 55 de la Ley 25/2005, de 24 de noviembre, reguladora de las entidades de capital riesgo y de sus sociedades gestoras, que queda redactado como sigue:

«Artículo 55. Otras disposiciones.

En materia de prescripción de infracciones y sanciones, de posible exención de responsabilidad administrativa, de imposición de multas coercitivas y de ejecutividad de las sanciones que se impongan conforme a esta Ley, resultará de aplicación lo dispuesto respectivamente en los artículos 83, 88 bis, 90 y 94 de la Ley 35/2003, de 4 de noviembre, de instituciones de inversión colectiva.»

Disposición final séptima. Modificación de la Ley 16/2009, de 13 de noviembre, de servicios de pago.

El apartado 3 del artículo 51 queda redactado como sigue:

«3. Tendrán la consideración de normas de ordenación y disciplina de los proveedores de servicios de pago a los que se refieren las letras a), b) y c) del apartado I del artículo 4, las disposiciones contenidas en los títulos I (a excepción del artículo 5) y II de esta Ley, las previstas en los artículos 18 y 19 del título III, el artículo 50, las disposiciones del Reglamento (CE) 924/2009 del Parlamento Europeo y del Consejo, de 16 de septiembre de 2009, relativo a los pagos transfronterizos en la Comunidad y por el que se deroga el Reglamento (CE) 2560/2001, así como cualesquiera otras leyes y disposiciones de carácter general que contengan preceptos específicamente referidos a los proveedores de servicios de pago y de obligada observancia para los mismos. Su incumplimiento será sancionado como infracción grave, siempre que las mismas no tengan carácter ocasional o aislado, de acuerdo con lo previsto en la Ley 26/1988, de 29 de julio, de disciplina e intervención de entidades de crédito.»

Disposición final octava. Modificación de la Ley 10/2010, de 28 de abril, de prevención del blanqueo de capitales y de la financiación del terrorismo.

Se introduce un nuevo inciso en el apartado h) del artículo 2.1, que queda redactado del siguiente modo:

«h) Las entidades de pago y las entidades de dinero electrónico.»

Disposición final novena. Modificación de la Ley 2/2011, de 4 de marzo, de Economía Sostenible.

La Ley 2/2011, de 4 de marzo, de Economía Sostenible, queda modificada como sigue:

Uno. Se modifica el apartado treinta y uno de la disposición final quinta, que queda redactado como sigue:

«**Disposición final tercera.**

Los requisitos de información sobre el control interno previstos en el artículo 61 bis.4, letra h), de esta Ley, y en el artículo 31 bis.dos.j) de la Ley 31/1985, de 2 de agosto, de regulación de las normas básicas sobre órganos rectores de las cajas de ahorros, serán exigibles a partir de los ejercicios económicos que comiencen el 1 de enero de 2011 y su contenido será incluido en el Informe Anual de Gobierno Corporativo que se publique en relación con dichos ejercicios.»

Dos. Se modifica la disposición final sexta, que queda redactada del siguiente modo:

«**Disposición final sexta. Modificación de la Ley 26/2003, de 17 de julio, por la que se modifican la Ley 24/1988, de 28 de julio, del Mercado de Valores, y el texto refundido de la Ley de Sociedades Anónimas, aprobado por el Real Decreto Legislativo 1564/1989, de 22 de diciembre, con el fin de reforzar la transparencia de las sociedades anónimas cotizadas.**

Se añade una nueva letra j) en el apartado dos del artículo 31 bis de la Ley 31/1985, de 2 de agosto, de regulación de las normas básicas sobre órganos rectores de las cajas de ahorros, con el siguiente tenor literal:

«j) Una descripción de las principales características de los sistemas internos de control y gestión de riesgos en relación con el proceso de emisión de información financiera regulada.»

Disposición final décima. Títulos competenciales.

La presente Ley se dicta de conformidad con lo dispuesto en el artículo 149.1.6.^a, 11.^a y 13.^a de la Constitución Española que atribuye al Estado la competencia sobre legislación mercantil, bases de la ordenación del crédito, banca y seguros y bases y coordinación de la planificación general de la actividad económica, respectivamente.

Disposición final undécima. Incorporación de Derecho de la Unión Europea.

Mediante esta Ley se incorpora parcialmente al Derecho español la Directiva 2009/110/CE del Parlamento Europeo y del Consejo, de 16 de septiembre de 2009, sobre el acceso a la actividad de las entidades de dinero electrónico y su ejercicio, así como sobre la supervisión prudencial de dichas entidades, por la que se modifican las Directivas 2005/60/CE, 2006/48/CE y se deroga la Directiva 2000/46/CE.

Disposición final duodécima. Habilitación para el desarrollo reglamentario.

Se habilita al Gobierno para dictar cuantas disposiciones sean necesarias para el desarrollo, ejecución y cumplimiento de lo previsto en esta Ley.

Disposición final decimotercera. Entrada en vigor.

La presente Ley entrará en vigor el día siguiente al de su publicación en el «Boletín Oficial del Estado».

Por tanto,

Mando a todos los españoles, particulares y autoridades, que guarden y hagan guardar esta ley.

Madrid, 26 de julio de 2011.

JUAN CARLOS R.

El Presidente del Gobierno,

JOSÉ LUIS RODRÍGUEZ ZAPATERO

Appendix 1.5 Funcional Analysis of Eurocat Microencorsement and Mutual Credit System

Eurocat system:

Terms and Definitions.

A **Eurocat** (euc) is a monetary instrument for measuring credit between members and is equivalent in value to one Euro.

Members are people, institutions or businesses with a valid account in the Eurocat system. We distinguish three classification of members:

By type:

People

public institution

private institution

business.

By activity:

members who have an account (consumers).

members who have access to credit (production units: they produce goods and services, and consume).

By guarantee type (only members with access to credit)

micro-endorsements

surety

property mortgage

etc...

Balance is the amount of Eurocats the member owes or is owed by the system.

Credit. An institution or company member can spend into a negative balance by buying goods and services from other members of the system within its credit limits.

Credit limits: Every institution or company will have a credit limit they can't surpass. It will be related to the guarantees they offer. Each company can have a credit limit for each of the guarantee types. When having more than one active guarantee type, the company's credit limits will accumulate, creating a consolidated credit limit which is the addition of the credit limits of all guarantees in use.

Making payments. Members can transfer Eurocats to other members at any time, however. Although members can only see their own trading histories, there should be general stats about Eurocat activity visible to all members.

The administrator is a representative of EMC, who manages the EMC and has the authority to view and edit all the members' account details and in particular, credit limits. The administrator evaluates or supervises the evaluation of the credit guarantees and the subsequent allocation of credit.

Guarantee: Each company has to provide one or more guarantees to back its credit in the system. There can be multiple types of guarantees. These can be based on a surety (insurance on its own default), or others. One possible type of guarantee is a micro-endorsement system built into the system as a means to allocate and to guarantee credit. The credit limits are automatically established in it (see point B below).

A guarantor is a participating Eurocat member who guarantees to pay the debts of another member who becomes insolvent. The guarantor is a key figure in the micro-endorsement system.

The **Eurocat Management Centre, EMC**, is the productive unit in the Ineval Foundation that is devoted to managing the Eurocat system.

Central account: The EMC will be a member of the Eurocat system as well. It will derive its sustenance from selling the system's management services to members, plus possibly other services as well. As a member of the Eurocat system, the EMC will have an account, the central account, and will be allocated a credit limit. The administrator manages the central account as well.

The **Escrow account** is a bank account controlled by the administrator and containing Euros.

The **Import-export Account.** The administrator will also handle a special account in the system called the Import-export Account, with limitless credit facility, also free of any guarantee requisites, in order to buy with Eurocats the inflow of Euros paid by members into the Escrow Incoming Account (See point 19 about buying Eurocats). The EMC will accrue by one Eurocat the account of any member depositing one Euro into the Incoming Escrow Account. Conversely, the balance of the Import-export Account will be reduced every time a member chooses to buy Euros with Eurocats, under the provisions explained hereafter (See point 25 to 27 about cashing out).

Exchange cycle. One exchange cycle is completed when a participating member has spent Eurocats up to their allotted credit limit and has also sold products or services up to that same value.

Fulfillment ratio refers to the number of exchange cycles each member completes in one financial year. The fulfillment ratio is calculated as the total annual spending or total sales – whichever is lesser, divided by the allocated credit limit.

Credit conditionality: Each member with access to credit must complete a minimum number of exchange cycles per year. i.e. each company must have a minimum fulfillment ratio according to their credit type (See point 23 below). When entering the system, members will have a grace period of 3 months in which they don't have to fulfill this criteria.

Default: A member with access to credit is said to have defaulted when it both doesn't fulfill the credit conditionality and when it has a debt balance to the system.

Potential credit: This is the maximum aggregate monetary mass that can potentially be created through approved credit in the system.

Buying Eurocats: Members can top up their Eurocat credit at any time by buying Eurocats through the official site via euro transfer or by debiting a bank account in euros. All euros are deposited into the Escrow account.

(Note that we have to adhere to the electronic money law exception: account balances of eurocats purchased with euros shouldn't be higher than 150 euros per member. But individuals in the eurocat system can be earning money in eurocats –which are not subject to this limitation- and purchasing eurocats with euros –which are subject to the limitation).

Access to information: Members will see two balances, their current Eurocat balance and the amount they are able to spend, which is their balance plus the credit limit. Members can transfer Eurocats to other members at any time, however, members can only see their own trading histories.

Turnover: This refers to total sales in Eurocats in a given period of time, for either a participating member or the whole system.

Velocity is the total Turnover of the system in an annual (or annualised) period divided by the total potential credit.

There are **three types of credit lines** members can have access to in the Eurocat system. We call them: M1, M2, M3. Initially, the M1 alone will be used, but M2 and M3 should be operational when required. The three different types of credit lines are designed for activities with different risk levels and ROI, and for each one of them there will be a different Velocity target. It is necessary to be able to ascertain each type's variables: Potential Credit, Turnover, Velocity...

M1: commercial credit for usual activities in existing companies: Target $V1=4$

M2: credit for new activities undertaken by existing companies: Target $V2=1$

M3: Credit for new activities in new companies: Target $V3=0,25$

Membership fees. Members will pay an entrance fee and an annual fee. Both fees will be paid in Eurocats, in principle. However, the entrance fee might be made to be paid in Euro.

Cashing out

The Escrow Account will have two sub-accounts, by name: Incoming and Provision. 90% of each month's new deposits into the Incoming Escrow account will be made available on the first day of following month for members to buy back Euros with Eurocats at a rate of 1 euc per 1 euro. Members will have one week to withdraw euros from the Incoming Escrow Account, after the closing of the natural month, such that the maximum amount which each member can withdraw is a function of their recent trading activity and balance:

Members who earn income in Eurocats can withdraw a certain percentage of their turnover of one month (the mean of the latest 6 months). This is the same for all members except for the EMC.

Credit limits apply: members can't cash out (buy back euros) beyond their credit limit, in any case.

Provision fund: The Eurocat provision fund is formed by 10% of the net balance of each month's new deposits into the Escrow account.

Cashing out by the EMC. Noting that the management of the system will certainly involve expenses in Euros, the EMC is granted the faculty of cash out as many Euros as required, instead of just a percentage of its turnover like the other members (credit limits apply), for the sustainability of the system. This will take place on the 27th day of each month. The remaining new deposits will be devoted as explained: 90% to distribute among members and 10% to the provision fund.

Micro-endorsement credit system

1. How it works: This is both a method of allocating credit and a method of guaranteeing against credit default. Each company can receive and give endorsements to other companies. We define two figures for each company X:

1. Endorsements received by company X: is the total amount guaranteed to company X in Eurocat endorsements by other companies or guarantors.
2. Endorsements provided by company X: is the total guaranteed by company X in Eurocat endorsements as a guarantor to other companies.

The micro-endorsement credit system allocates credit to each company in the following way: The Company X's credit limit is figure 1 or 2, whichever is lesser.

2. The basic rules to provide endorsements are the following:

- A company cannot endorse one of its own guarantors (This can be easily implemented via CIF or unique company ID).
- Every endorsement will have an upper limit fixed by the EMC, following the decisions taken by the community of members, such as to spread the risk of any given default and exclude any systemic risks. The system's software will take care of its implementation.
- Company F cannot withdraw its endorsement provided to Company G while that endorsement is in use by any of both companies. i.e. If the withdrawal of Company F's endorsement to company G results in a reduction of credit limit of any of the two companies below their actual debt, then the endorsement can't be withdrawn, as consequentially Company G's debt or Company F's debt, or both, would not be fully guaranteed.
- Company F, as a guarantor of company G, can check company G's fulfillment ratio at all times
- An offer to endorse or get endorsed will expire in one month.

- Any company can accept or refuse an offer to endorse and/or a request to get endorsed it has received. In the meantime, the endorsement will be put on hold (until it expires, is accepted, or is refused).

3. Guarantees: In the micro-endorsement credit system, the credit is guaranteed in the following way: Let's say Company D has defaulted. Its debt is divided among Company D's guarantors, proportionally to the endorsements they provided to Company D. So, the guarantor's own balance in Eurocats is decreased by its share of Company D's debt.

Because Company D was necessarily also endorsing other companies, the endorsements Company D provided to those companies will be withdrawn when company D defaults.

If these endorsements can't be withdrawn, because they are in use, then they will be temporarily transferred to the Central Account and backed by the Eurocat provision fund until such outstanding credits are honoured or alternative guarantors are found. Whenever these endorsements are not in use, they will be withdrawn.

Creating an account:

Method 1: Eurocat Administrator opens accounts for business and manually enters member's details and credit limits.

Method 2: Some company, person or institution applies to be a member filling out a form. This creates a **registration application** status that the administrator can accept or refuse.

Method 3: Current members invite business they trust and offer to endorse them for a certain amount. In doing this, current members must register some data of the prospective new members, which are:

Company name

CIF (Fiscal Id)

Contact name

E-mail

Telephone

Endorsement amount.

This creates a **pre-registration status** for the prospective new member. The prospective member may then:

Not finish the registration. The company will remain in the pre-registration status.

Finish the registration (this creates a registration application status for the administrator to confirm).

Once become a member, accept or refuse the endorsement

User story for micro-endorsements

Company user story: Any company which is already a member and enters the micro-endorsements system.

In their user interface, at their account management screen, the user will find a button "Endorsements" or "Trust". This button has two modes:

Blue: Normal mode (no news)

Red: your endorsements have changed (other companies have changed their endorsement relationship with you: they have endorsed you, changed the endorsement they had on you, accepted your endorsement, not accepted your endorsement, etc).

Endorsement main menu

When they enter, they will find:

Your credit limit is: xxxx

News: (one news for each line with endorsement changes).

Received endorsements - total amount (if you click on this, you display them all).

Granted endorsements - total amount (if you click on this, you display them all).

Petitions to get endorsed (xxx euc) – to endorse (zzz euc) (you can answer petitions from other companies to you, and see the status of your petitions).

+ Add New endorsement (if you click on this, you display a form to offer or request an endorsement to a company you still don't have any endorsing relationship with).

History (non-active endorsements and expired or refused petitions).

2nd level (when you click in the links of the main menu)

Received endorsements (total amount: xxx euc)

It shows a list of active endorsements in a table (it either goes to a new screen or it appears below in the 1st screen). Each line is a company (a guarantor of the company) with the following fields:

Box (to select).

Company name.

Amount of the endorsement.

Details: opens a new window with more information: date of emission, date of acceptance, modifications: date and amount.

Actions: drop-down list: cancel, edit.

Cancel:

If the endorsement is not in use, It will erase the company from your guarantors list, but it will keep it in the company's endorsement historic.

If the endorsement is in use, it will tell you the endorsement is in use and you can't cancel it.

Edit: (the company attempts to change the endorsement one of its guarantors has given it): it opens a field to type the new amount:

Increase: it will open a petition to your guarantor.

Reduce: (provided the company is not using the endorsement) it reduces instantly the endorsement and notifies the guarantor.

Granted Endorsements (total amount: xxx euc)

It shows a list of active endorsements in a table (either goes to a new screen or appears below). Each line is a company that our company has endorsed with the following fields:

Box (to select)

Company name

Amount of the endorsement

Fulfillment ratio of the company (in green if it is above the minimum, in red if it is not).

Details (opens a new window with more information: date of emission, date of acceptance, modifications: date and amount).

Actions (drop-down list with two options: cancel, edit.

Cancel:

If the endorsement is not in use it will be immediately cancelled, and the company will disappear from the list of companies you are endorsing, but it will appear in the history.

If the endorsement is in use, it shows to the company text I: (sorry, this endorsement is in use) and it will create a petition to cancel, and keep it on hold until the endorsement is not in use any more, then it will execute automatically the cancelation.

Edit (the company attempts to change the endorsement it granted to another company in the past): it opens a field to type the new amount:

Increase: if the amount increases, a petition will be opened and it will be sent to the other company offering to increase the endorsement.

Reduce:

If the amount of the reduction is not in use, it will be immediately cancelled. In the list, the company will display the new amount of the endorsement. There will be a record of it in the historic.

If the amount of the reduction is in use, it shows to the company text I: (sorry, this part of your endorsement is in use and it can't be withdrawn) and it will create a petition to reduce the endorsement, and keep it on hold until the endorsement is not in use any more, then it will execute automatically the reduction and leave a record in the historic.

Petitions

Although the main menu it shows total amount of petitions to get endorsed and total amount of petitions to endorse, if you click to access this 2nd screen it shows two consecutive lists of all unanswered petitions which are still active (they haven't been refused, accepted, nor have they expired yet), in two lists: "Sent Petitions" and "Received petitions". The categories are different because the possible actions for all sent petitions are the same: to re-send or to withdraw, and the possible actions for all received petitions are the same: to accept or to refuse.

"Sent petitions": Each line of the table refers to a company with the following data:

Box (to select).

Company name.

Amount of the endorsement.

Type: to endorse/ to get endorsed

Date of emisión

Actions: drop-down list: re-send, withdraw.

"Received petitions": Each line of the table refers to a company with the following data:

Box (to select).

Company name.

Amount of the endorsement.

Type: to endorse/ to get endorsed

Details: opens a new window with more information: date of emission, date of refusal.

Actions: drop-down list: accept, refuse.

+ Add new endorsement

Clicking here either opens a new window with a form or the form appears below.

The form has the following fields:

Type: to endorse/ to get endorsed

Company name

Company fiscal code (CIF)

Manager name

e-mail

Telephone number

Amount of the endorsement.

Button (Send)

Answers:

If the company x is not a member yet, it creates a pre-registration (as described in point B) in any case, it displays message: "Thank you. A petition to Company x has been sent. Check your endorsement news for updates".

If the company tries to endorse another company that is endorsing it already, display error message: "Company x is already endorsing you. Sorry but you can't endorse a company that is endorsing you".

Endorsement petitions expire after 30 days if they don't get an answer. When that happens, a news will appear in the sender's endorsement main menu: Your petition to company X has expired.

History:

Shows a list of companies with whom you have had petitions or endorsements but you are no longer in endorsing relationship with: non-active endorsements and non-answered / refused petitions. Each line is one company:

Box (to select).

Company name.

Amount (the highest amount of the endorsement or of the petition).

Type: the closest relationship you have had with this company:

Granted or received endorsement (if it ended up being one)

Sent or received petition (if it was never accepted)

Details: opens a new window with more information: who asked who what, date of emission, modifications, end date).

Actions: drop-down list: re-send (sent petitions), re-activate (endorsements, received petitions), erase (it erases from the user view, not from the admin).

Administrator user story Related to the Micro-endorsement system.

Total active endorsements: number, total amount and mean amount and standard deviation ->: endorsements list with: guarantor – endorsed – amount (in euc) — starting date fulfillment ratio of the endorsed.

Total companies in the micro-endorsement system: xxx -> list with company name credit limit, consolidated credit limit, balance and fulfillment ratio -> company X: endorsement main menu.

Total trust in use: monetary mass endorsed with the micro-endorsement system: xxx (figure and percentage of the total trust).

Unused total trust: xxx (figure and percentage of the total trust).

Petitions on hold: (number and total amount)-> list with petition sender (A), petition receiver (B), type of petition (A wants to endorse B or A want to get endorsed by B), and status of the petition receiver (pre-registered or member).

Pre-registrations: (number)--> list with company name, petition date, company inviting (sending petition to it), petition type (to endorse / to get endorsed).

General Key performance indicators

Distribution of members: Number of members in each type.

Graphic representation (GR): cake with the distribution.

GR: time evolution of each type of user.

Turnover: This refers to total sales in Eurocats in a given period of time, for either a participating member or the whole system.

Velocity (for each type of account: M1, M2, M3) is the total Turnover of the system in an annual (or annualised) period divided by the total potential credit.

Engagement: Percentage members which balance is not = 0, over the total. It tells us what users are paying and accepting eurocats, from all who are able to do so.

GR: tart distribution

GR: Evolution or percentage overtime.

Fees: (in a period) Commissions/fees earned by the EMC.

GR: evolution of this variable in time.

Money Supply: The total eurocats circulating in the system that matches the credit actually used in a given time.

GR: evolution of this variable in time.

Potential credit: This is the maximum aggregate monetary mass that can potentially be created through approved credit in the system.

Currency in circulation per each member in the community whose balance is above 0: Mean, median, and standard deviation: This can help us detect patterns of accumulation. It is also interesting to know what percentage of them have access to credit.

GR: ordinate: number of users; abscissa: individual currency holding tranches. marking where the mean and the median is.

Debt: Liabilities for each user community whose balance is below 0: Mean, median and standard deviation: this indicates the distribution of credit in eurocats and can help us to detect patterns of indebtedness.

GR: ordinate: number of users, abscissa: individual credit tranches. marking where the mean and the median is.

Velocity of money: Net annual turnover or annualized divided by total potential credit. We exchange indicates how many cycles have been carried out in aggregate. The circulation rate should be between 1 and 4.

Nonfunctional members: List of members whose fulfillment ratio is only by 25% over the minimum or lower (for instance, if MI accounts' minimum fulfillment ratio is 2, nonfunctional members are the ones below 2,50 fulfillment ratio). This list should detail the company name, balance and the date of the oldest transaction, and if they are in the grace period (see credit conditionality). members whose performance ratio is so low are potential problems. They either have eurocats they don't spend, or have debt and don't redeem it, or have not made any transaction yet. They have to be reviewed and it is necessary to find out why they have such a low ratio.

Risk members. Nonfunctional members whose newest transaction date is older than X, who are out of the grace period (to be determined: 4 months for instance) and whose balance is negative: could become default in the system any moment. Percentage of these members in the total community.

Alert: Default member: Any members that defaults.

References

Amato M. (2015), “Le développement des systèmes de compensation pour dynamiser l'économie sur desterritoires limités”, in Magnen J.-P., Fourel C., Meunier N. (2015b), pp. 40-47.

Birner, J. (2012a), “Moneta cattiva, male collettivo; moneta buona, bene collettivo: le sfide attuali alle istituzioni rappresentative dei beni collettivi”, *Archivi Scialoja-Bolla*, N° 1, January, p. 85-123. Available on line from Jack Birner. <http://www.researchgate.net/publication/267214170> . Last Accessed 16 June 2015.

Birner, J. (2012b), “If bad money is a collective bad, isn't good money a collective good?”, *Corvinus Journal of Sociology and Social Policy*, Issue: 2, p. 338, on Available from Jack Birner <http://www.researchgate.net/publication/267214063> . Last Accessed 9 June 2015.

Blanc J., Fare M. (2015), “Un panorama des dispositifs de monnaies associatives”, in Magnen J.-P., Fourel C., Meunier N. (2015b), pp. 58-62.

Blanc J, Fare M. (2014). *Les dispositifs de monnaies locales en quête de ressources: entre expérimentation et modèles socio-économiques. XIe Rencontres du Réseau interuniversitaire de l'économie sociale et solidaire « L'économie sociale et solidaire en coopérations»*. May, 2014, Lille, France. <http://riuess2014.sciencesconf.org/30870/document> . Last Accessed 20 June 2015.

Blanc J. et Fare M.(2010), *Quel rôle pour les collectivités locales dans la mise en œuvre de projets de monnaies sociales?*, XXXes Journées de l'Association d'Economie Sociale Charlevoi.

Castañer J. and Rubio A. (2015a), *DigiPay4Growth, Deliverable 2.1.2, Report on Legal Compliance – Catalonia*, <http://www.digipay4growth.eu/wp-content/uploads/2015/02/D2.1.2-and-D2.2-legal-research-Catalonia.pdf>. Last Accessed 20 June 2015.

Castañer J. and Rubio A. (2015b), *DigiPay4Growth, Deliverable 2.2, Legal Check Methodologies – Catalonia*, <http://www.digipay4growth.eu/wp-content/uploads/2015/02/D2.1.2-and-D2.2-legal-research-Catalonia.pdf>. Last Accessed 20 June 2015.

Clarke P. (2015), *Petition Against California Legislation, April 6*, <http://bitcoinvox.com/article/1593/petition-against-california-legislation> . Last Accessed 21 September 2015.

de Freitas C. (2015), “Banque Palmas – Brésil, une banque du peuple & une monnaie locale : Innover pour s'affranchir durablement de la précarité et de l'exclusion, faire société en agissant sur l'ensemble des instruments et leviers politiques, économiques, sociaux et culturels”, in Magnen J.-P., Fourel C., Meunier N. (2015b), pp. 48-57.

Gallagher C. (2015), *Here at the Hotel California: Statement in Response to an Increasingly Regressive Legislature, March 17*, <https://bitcoinfoundation.org/forum/index.php?/topic/1275-here-at-the-hotel-california-statement-in-response-to-an-increasingly-regressive-legislature/> . Last Accessed 21 September 2015.

Giraud, G. (2014), *Illusion financière*, Les Éditions de l'Atelier/Les Éditions Ouvrières, Ivry-sur-Seine, first edition: October 2012.

Hess, C. and Ostrom, E. (2006), *Understanding Knowledge as a Commons: From Theory to Practice*, The MIT Press, Cambridge, Massachusetts.

Kushmeider, R. M. (2005), *The U.S. Federal Financial Regulatory System: Restructuring Federal Bank Regulation*, in *Banking Review*, vol. 17, n°4, p. 1-31.

Laudier I. (2015), “Quels apports de l'étude des circuits courts pour la compréhension des enjeux territoriaux des monnaies locales complémentaires” in Magnen J.-P., Fourel C., Meunier N. (2015b), pp. 29-31.

Lietaer B. A. (2001). *The Future Of Money: Creating New Wealth, Work and a Wiser World*, Random House, London.

Lucarelli S., Sachy M., Brekke K. J., Bria F., Vercellone C., and Baronian L. (2014), D3.4 - Field Research and User Requirements Digital social currency pilots, D-CENT Project. http://dcentproject.eu/wp-content/uploads/2014/06/D3.4-Field-research-currency_FINAL-v2.pdf . Last Accessed 21 September 2015.

Magnen J.-P., Fourel C., Meunier N. (2015a), D'autres monnaies pour une nouvelle prospérité : mission d'étude sur les monnaies locales complémentaires et les systèmes d'échanges locaux. Première partie. Ministère du Logement, de l'Égalité des Territoires et de la Ruralité; France. Secrétariat D'Etat au Commerce, à l'Artisanat, à la Consommation et à l'Économie Sociale et Solidaire, Paris.
http://www.economie.gouv.fr/files/files/PDF/rapport_monnaies_locales_complementaires_1.pdf . Last Accessed 21 September 2015.

Magnen J.-P., Fourel C., Meunier N. (2015b), D'autres monnaies pour une nouvelle prospérité : mission d'étude sur les monnaies locales complémentaires et les systèmes d'échanges locaux. Deuxième partie. Ministère du Logement, de l'Égalité des Territoires et de la Ruralité; France. Secrétariat D'Etat au Commerce, à l'Artisanat, à la Consommation et à l'Économie Sociale et Solidaire, Paris.
http://www.economie.gouv.fr/files/files/PDF/rapport_monnaies_locales_complementaires_2.pdf . Last Accessed 21 September 2015.

Magnen J.-P., Fourel C., Meunier N. (2015b) D'autres monnaies pour une nouvelle prospérité : mission d'étude sur les monnaies locales complémentaires et les systèmes d'échanges locaux. Troisième partie. Ministère du Logement, de l'Égalité des Territoires et de la Ruralité; France. Secrétariat D'Etat au Commerce, à l'Artisanat, à la Consommation et à l'Économie Sociale et Solidaire, Paris.
http://www.economie.gouv.fr/files/files/PDF/rapport_monnaies_locales_complementaires_annexes.pdf . Last Accessed 15 June 2015.

Manrique P. (2012), From Critique to Construction: The Integrated Cooperative in Catalonia, "Diagonal Blogs", August 6, <https://www.diagonalperiodico.net/blogs/diagonal-english/from-critique-to-construction-the-integrated-cooperative-in-catalonia.html> . (originally published in Spanish, October 25, 2011). Last Accessed 21 September 2015.

Meyer C., (2013a), Les finances solidaires comme biens communs durables: étude de cas de la Banque communautaire de développement Palmas (Brasil), Université libre de Bruxelles Available on the website <http://new.lucpire.eu/wp-content/uploads/M%C3%A9moire-C.-MEYER.pdf>. Last Accessed 2 June 2013.

Meyer C. (2013b), « Social currency for common goods. The case of the Palmas currency », WP 2013 The United Nations Non Non-Governmental Liaison Service, May.

Ostrom E. (1990), *Governing the commons. The evolution of Institution for Collective Action*, Cambridge University Press, Cambridge.

Perez Y.B. (2015a), Buttonwood SF Founder Petitions California's Proposed Bitcoin Bill, April 3, <http://www.coindesk.com/buttonwood-sf-california-bitcoin-bill/> . Last Accessed 21 September 2015.

Perez Y.B. (2015b), The Real Cost of Applying for a New York BitLicense, August 13, <http://www.coindesk.com/real-cost-applying-new-york-bitlicense/> . Last Accessed 21 September 2015.

Pillard H. (2015), "Les monnaies locales complémentaires sur support papier et le droit bancaire" in Magnen J.-P., Fourel C., Meunier N. (2015b), pp. 69-75.

Reitman R. (2015), A License to Kill Innovation: Why A.B. 1326 – California's Bitcoin License -is Bad for Business, Innovation and Privacy, (with the assistance of Joseph Bonneau, Lee Tien and Jamie Williams) <https://www.eff.org/it/deeplinks/2015/08/license-kill-innovation-why-ab-1326-californias-bitcoin-license-bad-business> . Last Accessed 20 June 2015.

Roio D., Sachy M., Lucarelli S., Lietaer B. and Bria F. (2015), D4.4 - Design of Digital Social Currency, D-CENT Project. http://dcentproject.eu/wp-content/uploads/2015/05/D4.4-final_v4.pdf . Last Accessed 21 September 2015.

Roemer, J.E. (2006), "Kantian Allocations", Working paper N° 1582 della Cowles Foundation for Research in Economics, University of Yale.

Ruddick W.O. and Mariani L. (2013), "Complementary Currencies strengthening the Social and Solidarity Economy : Case Studies from Kenya", The United Nations Non-Governmental Liaison Service, May, <http://www.unrisd.org/sse-ngls-ruddick-mariani> . Last Accessed 21 September 2015.

Servet J.-M. (2015), *La finance et la monnaie comme un « commun »* , Institut Veblen pour les réformes économiques, May.

Smart E. (2015), California's Version of New York's Infamous 'BitLicense' Defeated in State Legislature, "The Cointelegraph", September 16, <http://cointelegraph.com/news/115284/californias-version-of-new-yorks-infamous-bitlicense-defeated-in-state-legislature> . Last Accessed 21 September 2015.

Van Valkenburgh P. (2015), Our thoughts on the BitLicense: California in winning, "Coin Center", June 3, <https://coincenter.org/2015/06/our-thoughts-on-the-bitlicense-california-is-winning/> . Last Accessed 1 October 2015.

Vercellone C., Bria F., Fumagalli A., Gentilucci E., Giuliani A. Griziotti G. and Vattimo P. (2015), D3.2 - Managing the commons in knowledge economy, D-CENT Project. <http://dcentproject.eu/wp-content/uploads/2015/05/D3.2-final.pdf> . Last Accessed 21 September 2015.

Voinea A. (2015), How digital currencies are boosting the social economy in Catalonia, 2 June, "Cooperative News", <http://www.thenews.coop/96198/news/general/digital-currencies-boosting-social-economy-catalonia/> . Last Accessed 21 September 2015.

Zanolli R. (2015), "La monnaie des systèmes d'échange locaux (SEL) après la Loi ESS", in Magnen J.-P., Fourel